

AN ABSTRACT OF THE THESIS OF

THOYD O. LATHAM, JR. for the degree of DOCTOR OF EDUCATION
in EDUCATION presented on May 15, 1975

Title: A COMPARATIVE STUDY OF INSTRUCTIONAL GOALS AND OBJECTIVES
FOR SELECTED SECONDARY COOPERATIVE WORK EXPERIENCE PROGRAMS

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Abstract approved: _____
_____ Dr. Joel Galloway _____

STATEMENT OF THE PROBLEM

The problem studied was whether there exist significant differences between the perceived knowledge obtained by former secondary cooperative work experience students as compared to the instructional goals and objectives of these programs as identified by the Oregon State Department of Education.

THE PROCEDURE

The problem as it is identified above was divided into three phases. The first phase was identification and classification of the instructional goals and objectives that the Oregon State Department of Education had established for secondary cooperative work experience programs.

The second phase of this study was to verify that the eight Oregon secondary schools that participated in this study were in agreement with the instructional goals and objectives for cooperative work experience programs as had previously been identified.

The third phase of this study was an investigation of the perceived opinions held by former students of Oregon secondary coopera-

tive work experience programs about the actual effects the identified instructional goals and objectives have had. A mail survey questionnaire was used to gather the data.

The sample for the study consisted of 80 males and 126 females who were seniors enrolled during the 1970-71 school year in a cooperative work experience program in the eight Oregon high schools agreeing to participate in this study.

The F statistic was used to analyze contrast among the mean scores for each criterion variable statement with the .05 level of significance being used to determine differences existing between the two groups of male and female. Demographic data was compiled into tables for interpretation of the personal characteristics of the response population.

SELECTED FINDINGS

The analysis of variance test indicated that the two groups were alike in their responses to the criterion variable statements contained in the questionnaire. Significant differences at the .05 level did not occur in any of the criterion variable statements employed to test the null-hypothesis.

Other selected findings of importance were:

- Secondary cooperative work experience programs, as they have been offered in Oregon, were accomplishing a majority of the instructional goals and objectives which had been identified. A majority of former students surveyed believed they learned and benefited from the programs.
- Former students of these programs were more successful in obtaining and maintaining employment in comparison to the total state population of youths under 25 years old.

- A majority of females surveyed got their first job in the exact same area as their training.
- Two years after leaving high school a majority of the females surveyed were still employed in areas related to their cooperative work experience training.

The testing of the mean scores indicated that the two groups surveyed were similar in their responses. The hypothesis were retained in all of the criterion variable statements. The general acceptance of the hypothesis by the surveyed population may be interpreted as representing the entire population of all former senior students enrolled in Oregon secondary work experience programs during the 1970-71 school year.

SELECTED RECOMMENDATIONS

The author would recommend that a validation study be repeated at a future date. Other areas needing research are methods of improving coordination between student interests and/or vocational training and the actual placement in related work stations. Further research is needed in how the secondary cooperative work experience programs can be made more effective and efficient in placing students on jobs after leaving high school that are directly related to their training experience.

The evidence presented in this study has implications that need to be investigated by all personnel concerned with Oregon secondary cooperative work experience programs. These are implications that should be of interest to administrators of secondary vocational programs.

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A COMPARATIVE STUDY OF
INSTRUCTIONAL GOALS AND OBJECTIVES
FOR SELECTED SECONDARY
COOPERATIVE WORK EXPERIENCE PROGRAMS

by

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A THESIS

submitted to

OREGON STATE UNIVERSITY

in partial fulfillment of
the requirements for the
degree of

DOCTOR OF EDUCATION

June 1976

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Date thesis is presented May 15, 1975

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A COMPARATIVE STUDY OF
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CHAPTER I

INTRODUCTION

Background of the Study

During the last several years, there has been a growing concern in American society regarding the public school preparation of youth entering the labor market. The lack of adequate occupational preparation on the part of young people leaving school has created a demand for improved educational programs to assist them in meeting the challenges of the "world of work." This increase in the consciousness of society has been accomplished by an apparent growing dissatisfaction with the existing educational programs that are being used to provide for students' occupational needs.

The students leaving our secondary school systems are faced with the critical problem of identifying and preparing for an occupational role. In order to assist young people in selecting an occupational role, as well as providing the needed preparation once a tentative choice has been reached, many schools provide several programs through which occupational preparation may be achieved. These programs have typically been identified as follows: occupational education, work study, vocational education, and cooperative work experience. All of these programs share as

facilitate career choices by exposing the student to practical work experiences while at the same time providing formalized classroom instruction as deemed necessary by the local school system (Evans, 1971). But it has been this same relationship of work and study that has created a great deal of misunderstanding about the real values of cooperative work experience programs. Opposition has arisen out of the belief that any benefits gained by a student's work experiences are negated by his absence from the formal educational environment. Cooperative work experience is often opposed by educators who are accustomed to teaching in a school environment and are concerned that the development of these programs will reduce student enrollment in their classes (Evans, 1971, p. 199).

At the present time no conclusive evidence exists to either support or deny the value of knowledge acquired by former students of cooperative work experience programs. Proponents of the program, as well as opponents, have relied primarily upon individual educational and philosophical beliefs in maintaining their positions on the validity of the goals and objectives of cooperative work experience programs.

Due to uncontrollable variables such as the economic and sociological backgrounds of the students, individual differences in abilities, etc., difficulties are encountered in measuring the real benefits of cooperative work experience programs. Basic to this study was the question of whether or not cooperative work

experience provides students the background necessary to make a career choice and to prepare for it. The key to measuring cooperative work experience instruction lies in the identification and classification of variables that can be used in measuring the effectiveness of these programs before a significant study can be made. Until these variables are classified and measured in terms of student occupational preparation there will remain disputes as to the genuine benefits of a cooperative work experience program. Studies that provide empirical evidence either supporting or changing the stated goals and objectives of cooperative work experience programs are necessary.

Another factor of importance to this study is that for most of the last decade, the Federal government has supplied a great deal of financial assistance for expansion of existing cooperative work experience programs and for the creation of new ones (Public Law 90-576). With the assistance of Federal funds, cooperative work experience programs are rapidly increasing in size and number. This growth, however, has been based upon very limited evidence about the true values of cooperative work experience processes as a method for preparing students for making occupational decisions. This growth clearly demands investigation in order to evaluate the effects that cooperative work experience programs have on preparing students in meeting the challenges of the transition from school into the world of work. This is particularly important in the light of the current Federal legislation for vocational

education which holds that no program will operate without continuing feedback concerning the effectiveness and appropriateness of the product (Wallace, 1970).

The rapid growth of our population, the high unemployment rate, especially among young people, increasing technological advances, and continued changes in occupational patterns and job requirements have made it imperative that there be not only general follow-up studies of vocational education programs, but also studies directed to specific programs. In order to begin to find solutions to these problems, studies are needed that will determine the effectiveness of educational goals and objectives of cooperative work experience programs and the actual results they are having upon former students.

STATEMENT OF THE PROBLEM

The primary purpose of this study was to ascertain if differences exist between the perceived knowledge obtained by former secondary cooperative work experience students and the instructional goals and objectives of these programs that have been established by the Oregon State Department of Education.

The null-hypothesis tested was:

H_0 : There is no significant difference between the identified instructional goals and objectives of the cooperative work experience programs that exist in selected Oregon secondary schools

and their specified outcomes as perceived
by the former male and female students.

$$H_0: M_1 = M_2$$

An examination of approaches to the study of this problem suggested that it be divided into three phases. The first phase was the identification of the instructional goals and objectives that the Oregon State Department of Education has established for secondary cooperative work experience programs. Consistencies of direction and compatability of these identified instructional goals and objectives were accomplished by comparing them to those used by the eight individual high school cooperative work experience programs participating in this study.

Examples of the stated instructional goals and objectives which have been clearly identified by the Oregon State Department of Education for cooperative work experience programs at the secondary level are:

I. Occupational

- A. Provide exploration of a variety of work opportunities and working conditions.
- B. Prepare students so they shall be able to work needed adjustments to fellow workers, their immediate foremen or supervisors and employer.

- C. Provide the student with an opportunity to become familiar with the complexity of tasks that comprise a job.
- D. Provide the student with skills needed for employment.

II. Self-Understanding

- A. Provide the student with the opportunities to make discoveries and recognize attitudes and interests based upon their individual capabilities.
- B. Allow the students to identify with the satisfactions to be derived from work.
- C. Provide the students with the recognition of suitability, or lack of it, for an occupational field. (Oregon State Department of Education, Cooperative Work Experience Coordinators Manual, 1973.)

The second phase of this study was to verify that the schools selected to participate in this study were in agreement with the instructional goals and objectives for cooperative work experience programs as they have been established by the Oregon State Department of Education. Once the individual schools' cooperative work experience program instructional goals and objectives had been obtained, they were then compared with those established by the Oregon State Department of Education in order to examine how they correspond in their stated educational objectives.

The third phase of the study was an investigation of the perceived effectiveness of this educational experience. Former students of selected schools were surveyed in order to obtain their perceptions of the benefits cooperative work experience programs had upon their chosen occupational endeavors. It was a major objective of this study to provide descriptive data by which information could be accumulated in order to provide a basis for assessing the effectiveness of the identified instructional goals and objectives. After the data was collected and an analysis made, a verification of the influences these goals and objectives had upon the career patterns of former cooperative work experience program students was determined.

The data gathered by this study was used to measure the outcomes of the cooperative work experience program's instructional goals and objectives, and their influence upon career patterns of former students in terms of individually perceived results.

In order to identify areas of effectiveness of cooperative work experience program curricula, an investigation of former student labor market participation and perception of influences was necessary. Some of the dependent variables in this investigation were:

1. Career choices
2. Job selections
3. Occupational changes
4. Job changes
5. Types of jobs

6. Relatedness to cooperative work experience program training.
7. Type of training received in cooperative work experience program.
8. Reasons for changes.
9. Further training or education.
10. Wages and raises.
11. Unemployment.
12. Satisfaction.

It was in the author's interest that this study would contribute to a better understanding of the existing instructional goals and objectives of cooperative work experience programs in Oregon and the perceived effects they have upon the students' occupational experiences.

The stated problem of this study was based upon a basic premise that cooperative work experiences have a direct relationship on a student's transition from school into full-time employment. Therefore, based upon this assumption, an answer to the stated problem was necessary in order to verify the effectiveness of cooperative work experience program instructional goals and objectives. Through this procedure, it was possible to determine if there are educational changes that may be required by cooperative work experience programs that would provide the experiences required by the students for their occupational preparation.

In order to find an answer to the problem, the study was undertaken: 1) to investigate the stated instruction goals and objectives of cooperative work experience secondary programs in the State of Oregon; 2) to analyze the individual student's occupational experiences based upon their prior cooperative work experience program educational experiences; 3) to determine the success in meeting the identified instructional goals and objectives of the programs based upon the student's perceived responses; 4) exemplify predictions of outcomes of future programs; 5) to provide a model of future cooperative work experience evaluations.

PURPOSE OF THE STUDY

The primary purpose of this study was to ascertain if differences exist between the perceived knowledge obtained by former secondary cooperative work experience students and the instructional goals and objectives of these programs that have been established by the Oregon State Department of Education.

One of the most important objectives of cooperative work experience programs at the secondary level in Oregon is the preparation of young people for the "world of work" (Oregon State Department of Education, Cooperative Work Experience Coordinators Manual, 1972). This objective is justified by the fact that a majority of students leaving Oregon high schools each year are entering the labor market (Oregon State Department of Education, State Plan for Vocational Education, 1972). Because it is generally

accepted as the responsibility of the secondary schools to fulfill the needs of youth preparing to successfully enter the world of work, cooperative work experience programs have been looked upon as a program for providing the students with the necessary job training. It is thought that these programs provide the students with the occupational experiences necessary for entering the open job market (Evans, 1971).

The stated problem of this study was to determine if there is a significant difference between the projected outcomes of cooperative work experience programs in preparing students for occupational roles, and the actual perceptions of the former male and female students of these programs. This study has approached this question by investigating the identified instructional goals and objectives of cooperative work experience programs as they affect former students in career choices and occupational adjustments.

Once the effectiveness of cooperative work experience programs have been evaluated, based upon student perception of relatedness to occupational outcomes, it will then provide a model for determining the appropriateness of the identified instructional goals and objectives. In order to address itself to this question, this study has developed a survey instrument in order to provide empirical evidence for identifying the actual perceived results of cooperative work experience programs.

SIGNIFICANCE OF THE STUDY

There were several dimensions to the practical significance of this study. If reliable and valid variables for evaluating the effectiveness of the identified goals and objectives of cooperative work experience programs could be found, they would prove useful in:

1. Determining the instructional value, as perceived by the former students, of the occupational awareness and preparation offered by the cooperative work experience programs in their high schools.
2. Determining the effectiveness of the on-the-job work experiences as a method of occupational preparation.
3. Determining if cooperative work experience programs have a significant effect upon accomplishing their individual occupational objectives.
4. Providing a basis for determining the effectiveness of cooperative work experience programs in meeting their identified instruction goals and objectives based upon the perceptions of former students.
5. Determining the perceived effectiveness of the identified instructional goals and objectives of the selected secondary cooperative work experience programs upon the occupational endeavors of former students.

The theoretical significance of this study is that it may be used as a model for developing an instrument for use as a basis of evaluating the total effectiveness of ongoing cooperative work experience programs.

Limitations of the Study

1. This study was confined to selected high school students who have completed a cooperative work experience program.
2. These students were selected from the June, 1971 high school senior class.
3. These students were in the labor market since June, 1971. Students who were in the labor market for approximately two years were chosen because this provided more comprehensive data. According to Wesley E. Budke and Melvin D. Miller (1973), a study involving students two years after they have left high school provides information on job histories, worker mobility and worker adjustment patterns which are of value to research. A two-year time span is not so long that the student's perceptions of his high school education experience is lost.
4. These students were available to answer a questionnaire during July, 1973.
5. This study dealt only with students who had remained in the Oregon geographical labor market.
6. This study included only those students who had completed a cooperative work experience program in an accredited public high

school offering vocational training in five or more occupational areas.

Assumptions

This study was based upon the following assumptions:

1. Cooperative work experience program graduates were capable of exercising the necessary judgments in order to indicate those things that have had an impact upon their career patterns and choices.
2. Career patterns and choices were not accidental, but were determined by definite social and psychological variables.
3. A significantly representative population was available to properly conduct this study.
4. All participants honestly reported information requested of them within the limits of their individual perceptions.
5. What a former student perceived about a program in which he had participated may not be only a reflection of the changes that were supposed to occur based upon the identified instructional goals and objectives, but also a description of what actually happened.

DEFINITION OF TERMS

The following terms were used in this study. They have been included to provide reference to their origin and for clarification of definition.

1. Advisory Committee

A group of persons, usually outside the educational profession, selected for the purpose of offering advice and counsel to the school regarding the vocational program. Members are representatives of the people who are interested in the activities with which vocational programs are concerned (American Vocational Association, 1971, p. 3).

2. Apprentice Training

An organized system for providing young people with the manipulative skills and technical or theoretical knowledge needed for competent performance in skilled occupations. The program usually involves cooperation among school, labor and management since apprentices learn the skills of the craftsman through on-the-job work experience and the related information in the classroom. The minimum terms and conditions of apprenticeship are regulated by state and local statutes or agreements (American Vocational Association, 1971, p. 3).

3. Avocational Interests

Those pursuits or hobbies which are distinct from the regular work or occupation of the individual and which are followed for recreational purposes (American Vocational Association, 1971, p. 5).

4. Cooperative Work Experience Education

An approved vocational education program which is currently eligible for federal vocational funds. Students are employed in occupations directly related to their career choices and their

vocational courses. Thus, their work experience becomes a practical laboratory for reinforcing the in-school occupational education. Students receive both pay and school credit for their work.

The degree of specialization in a cooperative work experience program will depend upon whether it is offered through a high school or a community college. In the community college, students are preparing for specific occupations and, therefore, more highly specialized work experience opportunities are provided. Typical cooperative work experience programs in community colleges provide experiences in law enforcement, fire protection, real estate, health occupations and other specialized areas. High school programs, on the other hand, would normally be geared to one or more of the occupational clusters and would offer a broader, less specialized, range of experiences for the student. (Oregon State Department of Education, Cooperative Work Experience Coordinators Manual, 1972, p. 12.)

5. Coordinating Teacher

A member of the school staff who teaches the related and technical subject matter involved in cooperative work experience programs and coordinates classroom instruction with on-the-job training (American Vocational Association, 1971, p. 6).

6. Coordinator

A member of the school staff responsible for administering the school program and resolving all problems that arise between the school regulations and the on-the-job training of the employed

student. The coordinator acts as a liaison person between the school and the employers in the cooperative work experience program (American Vocational Association, 1971, p. 6).

7. Counselor (Guidance)

An experienced and trained person who helps another individual to understand himself and his opportunities and to make appropriate adjustments, decisions, and choices in light of his unique characteristics and to initiate a course of training or work in harmony with his needs (American Vocational Association, 1971, p. 6).

8. Employment

The work mechanism which involves those activities and services related to jobs, occupations and careers in trade, industry, business, agriculture, home and community services and paraprofessional opportunities in the national economy. Gainful employment is that employment - job, occupation or career - for which wages and salaries are paid or with which income is directly associated. (American Vocational Association, 1971, p. 22.)

9. Employment Experience

A type of supervised experience consisting of a series of learning activities accomplished by the student as a paid employee (American Vocational Association, p. 23).

10. Evaluation

A systematic procedure whereby the quality of the teaching-learning process and the achievement of stated objectives are ascertained. An ongoing process that provides input and feedback to guide change and offer direction for the program and its

modification (American Vocational Association, B, p. 23).

11. Evaluative Criteria

Criteria used to evaluate the elements which comprise the total program or any specific phase of it. The objective of the evaluation criteria is to assist the local authorities in determining the quality and status of the program and changes which need to be implemented for strengthening the program (American Vocational Association, p. 23).

12. Follow-up Study (Vocational)

A survey to determine what occupations the students and graduates of vocational education courses enter and how effective their training was in relationship to actual needs of the job (American Vocational Association, 1971, p. 9).

13. General Education Program

A secondary school, junior college or adult education program of studies designed primarily to assist pupils with the common activities of citizenship, work and family life through a variety of electives. This is contrasted with specialized education which prepares for an occupation (American Vocational Association, p. 30).

14. Guidance (Vocational)

The process of assisting individuals to understand their capabilities and interests, to choose a suitable vocation, and to prepare for, enter, and make successful progress in it (American Vocational Association, 1971, p. 10).

15. Higher Education

Education above the level of the secondary school, which is provided for by colleges, universities, graduate schools, professional schools and some technical institutes (American Vocational Association, p. 34).

16. Instructional Feedback

Evidence of achievement, understanding, and behavior associated with those teaching activities eliciting particular responses and received within a particular mode of instruction (American Vocational Association, p. 38).

17. Job

A specific, assigned task which provides the medium by which the student practices and develops skills for an occupation (American Vocational Association, 1971, p. 12).

18. Occupation

A term referring to a person's regular work, business, pursuit or means of earning a living (American Vocational Association, p. 46).

19. Occupational Adjustment

Defined by the characteristics of individual satisfaction and acceptance of occupational choice.

20. Occupational Objective

A specific recognized occupational goal, selected by the student, the attainment of which is the purpose of his vocational education (American Vocational Association, p. 48).

21. Occupational Success

Defined as overall wages, advancements, and occupational stability as was identified by this study.

22. On-the-Job Training

Instruction in the performance of a job given to an employed worker by the employer during the usual working hours of the occupation. Usually the minimum or beginning wage is paid (American Vocational Association, 1971, p. 14).

23. Placement Service

Assistance in helping persons to locate work, either part-time or full-time, in the field for which they are trained, which is consistent with their abilities, experiences and background. When offered by the school, it is a phase of the vocational guidance program and involves liaison with employers to learn of job vacancies and success or failure factors of student-learners or graduates (American Vocational Association, 1971, p. 14).

24. Post-Secondary Vocational Education

Designed primarily for youth or adults who have completed or left high school and who are available for an organized program of study in preparation for entering the labor market (American Vocational Association, p. 52).

25. Preparatory Training

Programs preparing students for employment (American Vocational Association, 1971, p. 15).

26. Reimbursable Vocational Program

A class or curriculum offered through a public school which is organized and conducted in accordance with the provisions of the state plan for vocational education approved by the U. S. Office of Education. Such programs are eligible to receive funds from the state to cover, in part, certain costs of operation (American Vocational Association, 1971, q. 16).

27. Related Subjects

Classroom and laboratory courses designed to increase knowledge, understanding, and ability to solve technical and theoretical problems concerned with a particular occupation (American Vocational Association, 1971, p. 16).

28. State Plan (Oregon)

An agreement between the Oregon State Board of Education and U. S. Office of Education describing, a) the vocational education program developed by the state to meet its own purposes and conditions, and b) the conditions under which the state will use federal vocational education funds (American Vocational Association, 1971, p. 17).

29. Student-Learner (Student-Worker)

A member of a high school cooperative work experience program legally employed as a part-time worker and so classified by the Wage and Hour and Public Contracts Division of the U. S. Department of Labor for wages and hour regulation purposes (American Vocational Association, 1971, p. 20).

30. Training Agreement

An outline of learning experiences an employer agrees to provide for a student-learner enrolled in the various cooperative work experience programs (American Vocational Association, 1971, p. 21).

31. Vocational Education

Vocational or technical training or retraining which is given in schools or classes (including field or laboratory work and remedial or related academic and technical instruction incident thereto) under public supervision and control or under contract with a state board or local educational agency, and which is conducted as part of a program designed to prepare individuals for gainful employment as semi-skilled or skilled workers or technicians or sub-professionals in recognized occupations and in new and emerging occupations, or to prepare individuals for enrollment in advanced technical education programs, but which excludes any program to prepare individuals for employment in occupations generally considered professional or which require a baccalaureate or high degree (American Vocational Association, p. 73).

CHAPTER II

REVIEW OF THE RELATED LITERATURE

The review of the literature as was developed in this chapter began with a brief historical background of cooperative work experience programs in the secondary schools of the United States and, specifically, of Oregon. The perceived advantages and disadvantages of cooperative work experience programs, as well as the stated educational goals and objectives as defined both locally and nationally, were identified. The need for further research in the areas of cooperative work experience recommended by various writers has been summarized. Also included is a review of various evaluation tools and methods for cooperative work experience programs that are currently being used or that have been used in the past.

HISTORICAL BACKGROUND AND FEDERAL LEGISLATION AFFECTING COOPERATIVE WORK EXPERIENCE PROGRAMS

The list of educational philosophers who have supported the basic concepts of cooperative work experience programs includes some of the most historically significant. The first one of known importance was John Amos Comenius (1592-1670), who advocated a knowledge of the trades and preparation of an occupation for life. It was August Hermann Francke (1663-1727) who used the work concept in his school for young nobles. Johann Heinrich Pestalozze (1746-1827) stated that in joining work and education, a solution was found to the educational problems of the lower classes. Finally,

Phillip Emanuel von Fellenberg (1771-1844) combined practical trade training with the usual academic subjects in his school. (Ivins and Runge, 1951, p. 42)

The first actual cooperative work experience program was started by Mrs. Lucinda Wyman Prince in Boston in 1905. Her program was developed for the practical training of women for retail occupations. She was later put in charge of the retail training programs for the high schools and continuation schools in Boston. In 1919, she wrote the U.S. Federal Board for Vocational Education Bulletin No. 22, Retail Selling, which became a standard reference for distributive education (Ivings and Runge, 1951, p. 43). Whether or not Mrs. Prince was responsible for the origin and early promotion of cooperative work experience programs for secondary distributive education, as stated by Kenneth Haas, (p. 4) is not as important as the fact that she laid much of the groundwork for present day cooperative work experience in the high schools (Ivins and Runge, p. 44).

Although the first federal support for promoting vocational education was contained in the Morrill Act of 1862, the real beginning of public school vocational education federal funding began with passage of the Smith-Hughes Act of 1917. This act (Public Law No. 347) provided the first significant authorization for federal funds to be used for vocational education. The important result of the Act in respect to cooperative work experience programs was its emphasis upon cooperative training in high school

vocational education programs. An outcome of the Act was the Statement of Policies of the Federal Board for Vocational Education, published in 1917 (Mason and Haines, 1972, p. 65). This publication has had a lasting influence upon the nature and direction for development of high school cooperative work experience programs. It has been used as an authority in interpreting the Smith-Hughes Act and subsequent legislation and has had an effect in establishing the federal policies for such programs that received funding (Ivins and Runge, 1951, p. 31). Important federal legislation that supplemented the Smith-Hughes Act and had a relationship to high school cooperative work experience programs was the George-Dean Act of 1936 (Public Law No. 673). The George-Dean Act was the first federal act to provide permanent allocation of funds for cooperative work experience programs. The funding was liberalized to include vocational work experience programs outside of the area that had been strictly defined by the Smith-Hughes Act. It also emphasized the cooperation of schools and local business and industry in providing occupational training for students enrolled in vocational programs whether they were federally funded or not (Udell, 1971, p. 62).

Other federal legislation continued the trend of providing increased allocation of funding for vocational education programs. The George-Borden Act of 1946 (Public Law No. 586) was one of these pieces of legislation that was important because it provided federal funding for distributive educational programs. Included

in the funding for vocational distributive programs was the allocation of moneys to be used for distributive cooperative work experience programs (Udell, 1971, pp. 130-133).

Large scale expansion and reorientation of vocational education programs was the objective of the Vocational Education Act of 1963 (Public Law 88-210). Besides increasing authorization of funds established by previous acts, the Vocational Education Act of 1963 stipulated that funding be set aside for one four-year period especially for providing part-time employment for young persons who need to earn money if they are to continue their vocational education program on a full-time basis. Funding for this increased the number and sizes of cooperative work experience programs. It was the stated purpose of the Vocational Education Amendments of 1968 (Public Law No. 376) to authorize federal funding to states to assist them in maintaining, extending, and improving existing programs of vocational education.

The 1968 Amendment of the 1963 Vocational Education Act allocated more funding for vocational education than had ever existed before (Masion and Haines, 1972, p. 71). Part G of the Act authorized appropriations for cooperative work experience programs. It set aside \$20,000,000 for the 1969 fiscal year, \$35,000,000 for the 1970 fiscal year, and \$75,000,000 for the 1972 fiscal year. This money was to be divided between states for vocational education programs designed to prepare students for employment through cooperative work experience arrangements (Udell, 1971, pp. 851-853).

Based upon the federal funding provided for by Part G of the 1968 Amendments, it has been the intent of the Oregon State Board of Education to assist local schools in planning and developing cooperative work experience programs. There was no state money for funding of cooperative work experience programs although the Oregon Board's role was that of administering Part G funding. It was stated that in order for local school districts to receive those funds, the programs must relate directly to and be a reinforcement of the vocational program of instruction in which cooperative work experience students were enrolled (Oregon State Department of Education, 1971a, p. 20).

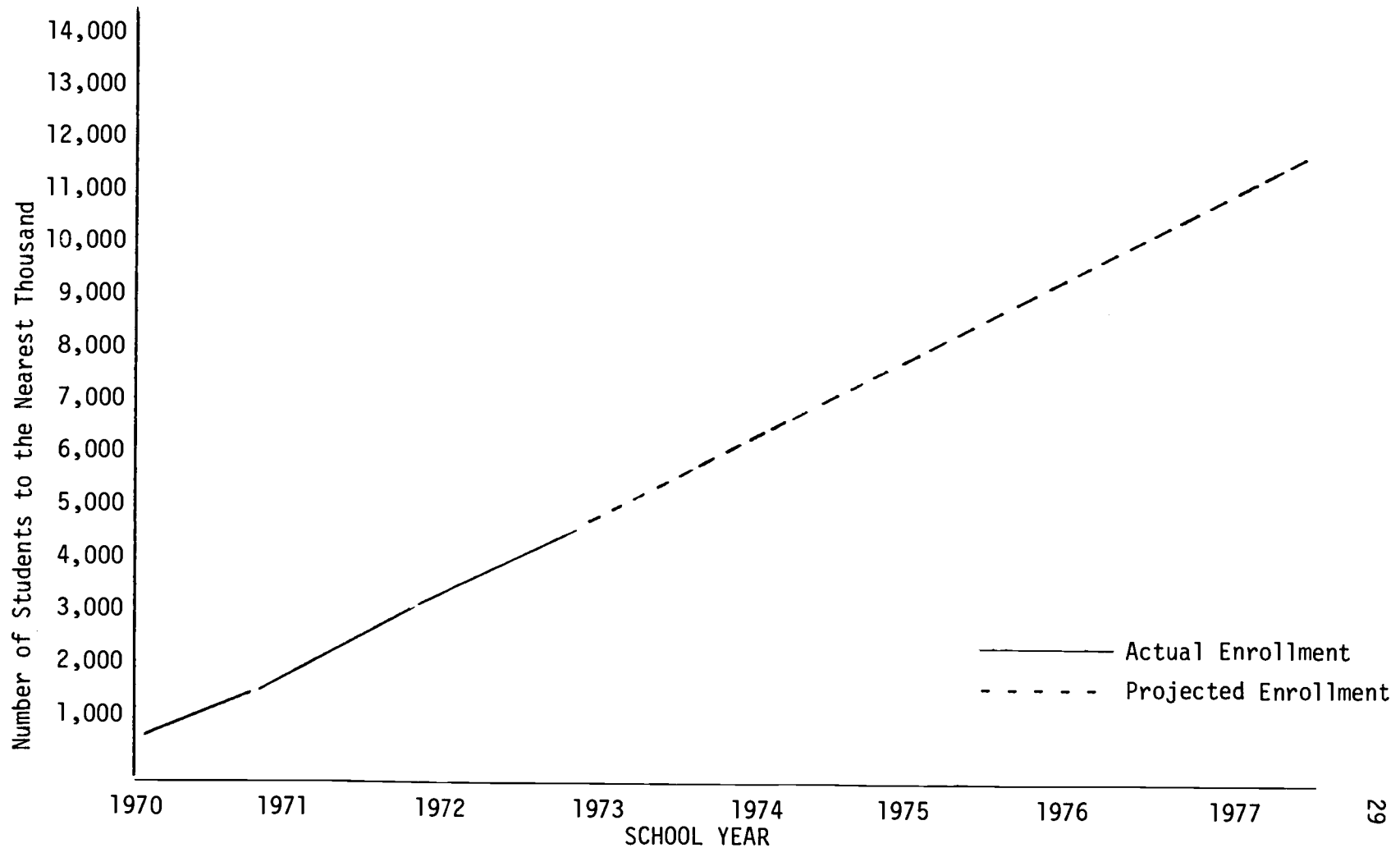
COOPERATIVE WORK EXPERIENCE IN OREGON

Part G funds allocated by the 1968 Amendments were used by the Oregon State Board of Education to encourage, plan, and implement cooperative work experience programs. Priority in disbursement of funds was given to school districts which served dense populations and also to districts having large numbers of dropouts and high unemployment among youth (Oregon State Department of Education, 1971a, p. 20). Thirty-three high schools were given Part G funds to help plan and/or develop cooperative work experience programs. These programs directly involved 1,700 Oregon high school students during the 1970-1971 school year. Also covered were fifteen smaller schools having limited vocational offerings. These schools were given funding to develop new programs in diversified

occupations. Eleven of these high schools had never had previous assistance. The other twenty-one receiving funding gave evidence of substantial program expansion or initiated cooperative work experience programs in new vocational areas. Forty-two percent of these high schools were located in high youth unemployment areas. Sixty-one percent of the state's Part G funding was expended in the high youth unemployment area schools. The increase in Part G funding has resulted in a parallel increase in percentages of Oregon high schools implementing cooperative work experience programs. However, many high schools were either still in the planning stage or not yet involved in cooperative work experience programs as of 1970 (Oregon State Department of Education, 1971a, p. 20). The Oregon State Department of Education has projected that approximately 12,000 students will be enrolled in high school cooperative work experience programs by 1977 (Oregon State Board of Education 1973). Note: See Table No. 1 (page 29).

Significant progress was made toward achieving the projected goal of 12,000 cooperative work experience students in 1972. Approximately fifteen percent of all high school students enrolled in vocational programs participated in cooperative work experience programs (Oregon State Department of Education, 1972a, p. 2). The total number of high school students enrolled in cooperative work experience programs was about 3,000 (Oregon State Department of Education, 1973a) out of a total student population for high school vocational education programs of 28,524 for the 1971-72 school

TABLE 1. Secondary Cooperative Work Experience Student Enrollment Growth and Projected Increases
Based Upon Information Supplied by the Oregon State Department of Education's Mini-Report
of 1973 Vocational Education



year (Oregon State Department of Education, 1972a, p. 4).

During 1972 the implementation of cooperative work experience programs as an integral part of all occupational clusters offered by the high schools was to become a major impetus (Oregon State Department of Education, 1972a, p. 14). Increased emphasis was placed upon the initiation and integration of cooperative work experience programs into vocational education curricula not previously provided in these programs in Oregon high schools (Oregon State Department of Education, 1972a, p. 24).

Specifically, the objectives for cooperative work experience programs at the secondary level as listed by the 1972 Oregon State Plan for Vocational Education, Part III, Section 6.0 and how well those objectives appear to have been met are as follows:

-Objective - Increase the number of cooperative work experience students to 15 percent of the total of all students enrolled in secondary grades 11 and 12 vocational curriculum.

-Accomplishment - The number of secondary students in cooperative work experience was increased from 8 to 15 percent of total of all students enrolled in secondary grades 11 and 12 vocational curriculum.

-Objective - Increase by 30 percent the total number of secondary schools offering programs in cooperative work experience education.

-Accomplishment - The total number of high schools in Oregon offering cooperative work experience programs was increased from 113 to 151 for a growth rate of 33.6 percent.

Approximately eighty-two percent of all Oregon high schools assisted with Part G federal funds were located in high youth unemployment areas during 1971-1972.

The Oregon State Board of Education has assumed the responsibility of identifying desirable components of cooperative work experience education and to incorporate these into existing local program operations. In an attempt to proliferate a statewide model cooperative work experience program, the necessary quality improvement of these identified elements has resulted in a continuous growth of local, regional, and statewide workshops for coordination of cooperative work experience programs (Oregon State Department of Education, 1972a, p. 25).

Relevant to all vocational education in Oregon is the State Board of Education's emphasis on instructional program evaluation. The stated function of the Oregon State Board of Education is to continue to assist local educational institutions in evaluating their vocational programs. The goal of the State Board of Education has been to evaluate the effectiveness of the vocational education program in meeting state program objectives (Oregon State Board of Education, 1973b, p. 26). Even though these program objectives are supposed to be based upon student needs, the Oregon State Board of

Education, does not have data available to accurately determine individual student needs.

Because students are given vocational education course credit for time spent on the job and the school receives reimbursement (1/2 normal rate) for this program, the Oregon State Department of Education has established the following criteria to be used as a basis for evaluating local cooperative work experience programs:

- The administration develops and plans programs to meet the needs, interests and abilities of students who want, need and can benefit from cooperative work experience programs.
- The administration cooperates with and encourages the teaching staff to improve instruction.
- The effectiveness of cooperative work experience programs in meeting student needs should be evaluated on a continuing basis.
- Vocational guidance is available to all students who want, need and can benefit from it.
- Instruction creates learning experiences which meet the educational needs of individual students.
- Students are provided with adequate instruction to help them achieve the occupational objectives of the curriculum pattern.
- Students are provided with adequate instruction to encourage sound safety practices and promote healthy work attitudes.

- Facilities, including equipment, instructional aids and supplies, enable students to meet the obligations of the program with efficiency.
- The administration insures that the cooperative work experience program is responsive to changing job requirements and local labor market needs.
- Cooperative work experience programs are designed to enable students to develop competencies necessary for further education or entry level employment in the recognized occupations.
- There are substantial and identified opportunities for employment in the occupations taught.
- The cooperative work experience program is designed to prepare individuals in an occupation or a group of closely related occupations.
- Instruction is based on skills and knowledge required in the occupation or cluster of closely related occupations. (Oregon State Department of Education, 1973b, pp. 26-28)

The Oregon State Board of Education has emphasized that evaluation of all aspects of local cooperative work experience programs and activities should be an integral part of all vocational education programs. The emphasis is based upon the trend in Oregon to make cooperative work experience programs an integral part of all vocational education programs.

The findings of these program evaluations are to be used by the State Board staff, the teacher education institutions and local cooperative work experience programs in planning, development, and modification of all phases of the program. (Oregon State Department of Education, 1973b, p. 28).

A primary goal of each cooperative work experience program approved by the Oregon State Board of Education is to provide educational experience for persons who, through a cooperative arrangement between the local school and employers, receive individual instruction, including the required academic courses and related classroom instruction, alternating study in school with work on the job in any occupational field, which complements the vocational class in which the student is enrolled. The two experiences must be planned and supervised by the cooperative work experience program coordinator and the employer so that each can contribute to the student's educational experiences as well as his individual employability. (Oregon State Department of Education, 1973b, pp. 104-106).

The Oregon State Board of Education guideline for cooperative work experience programs define work experience for job training which:

- is related to existing career opportunities that offer promotion and advancement;
- does not displace other workers who perform such work; and

- employs student-learners in conformity with federal, state, and local laws and regulations, and in a manner not exploiting the student-learner. (Oregon State Department of Education, 1973b, p. 106)

In order to be eligible for federal funds provided for under Part G of the 1968 Vocational Amendments, local cooperative work experience programs must provide the necessary information to demonstrate that suitable jobs for students enrolled in the programs have been arranged for through cooperation with employment agencies, labor groups, employers and other local community agencies. (Oregon State Department of Education, 1973b, p. 106)

A relatively new requirement for federal funding based upon the 1968 Vocational Education Amendments for local cooperative work experience programs was that they establish follow-up processes consistent with evaluation procedures set forth by the Oregon State Board of Education. The State Program Specialist responsible for cooperative work experience programs is to assist local teacher-coordinators and guidance personnel in maintaining a continuous and ongoing evaluation of programs. (Oregon State Department of Education, 1973b, p. 108)

According to Mr. Gerald Leadham, the Oregon State Board of Education Specialist for Cooperative Work Experience Education, the existing follow-up procedures and evaluation methods used by local cooperative work experience programs are superficial and cannot be used to assess the effectiveness of the program's educational experiences. The major reason this condition exists was

because up till then there was not a concentrated attempt to evaluate the effectiveness of cooperative work experience programs based upon students' perceived results. The emphasis of evaluation was based upon program assessment as interpreted by the cooperative work experience program coordinator (Leadham, 1973).

Several individual cooperative work experience programs were in the process of developing more comprehensive evaluation instruments and the Board itself was working on a total vocational education program evaluation process. As yet, none of these projects have been completed. It also does not appear that the evaluations will measure the former students' perceptions of their cooperative work experience program's effectiveness in aiding in their occupational situations (Leadham, 1973).

ADVANTAGES OF COOPERATIVE WORK EXPERIENCE PROGRAMS

Butler and York (1971a) state that experience in operating cooperative work experience programs has shown that the following general advantages exist:

- Studies on the economics of vocational education show higher rates of return on investment from cooperative work experience programs than other types of vocational education programs. Capital cost for the school is lower, and since the student is receiving wages for the on-the-job portion of the program, the cost for the individual is lower.

- Facilities and resources in the business community are used to supplement those provided for by the school.
- If suitable training stations are available, cooperative work experience programs can be offered in a specific occupational field (cluster) for a small group or even an individual student.
- School-community relations can be strengthened because successful cooperative work experience program operation depends upon the community for job placement and on-the-job instruction.
- Cooperative work experience provides relevant curriculum and instruction designed to respond to the student's needs and occupational requirements. The program is sensitive to occupational adjustment and career development needs by virtue of the continuous feedback from training sponsors and others.
- Cooperative work experience programs stimulate desirable attitudes toward work and the dignity of work.
- Cooperative work experience programs enable the student to apply vocational learning in real life situations.

- Cooperative work experience programs provide balanced vocational preparation including manipulative and technical skills.
- Cooperative work experience programs can be designed to prepare students with widely varying abilities for a broad range of occupational clusters. The cooperative work experience programs often serve as an incentive for students to complete their education.
- Cooperative work experience programs introduce students to local employment opportunities; they are an effective means of developing young people as productive citizens; and they contribute to a stable work force by encouraging them to remain in the community or return to the community after graduation. (Evans, 1969a; Huffman, 1967a; Swanson, 1969; University of Minnesota, 1969)

According to Roy L. Butler and Edwin G. York in their book "What School Administrators Should Know About Cooperative Vocational Education," specific advantages for students in cooperative work experience programs include the following:

- Students can relate education in a meaningful way to occupational interests at a period of life when it is natural to look outside the school for learning and earning opportunities.

- Students encounter an adult environment which causes them to examine their values and reappraise their potential in real occupational and social situations.
- Students have time to comprehend the significance of learning and the world of work by gaining early experience on jobs that are in harmony with their interests and abilities.
- Students make the transition from school to work, or to other educational endeavors, under the skilled guidance of the teacher-coordinator.
- The articulation of classroom instruction, on-the-job training, and student club activities contributes to developing the competency and confidence needed by the student.
- The teacher-coordinator instruction is supplemented with practices, material, and ideas of employers and employees in the occupational environment.
- Based on personal needs and experience gained on the job, students can help the teacher-coordinator select appropriate course content and methods of learning for the in-school phase of vocational instruction.
- Cooperative work experience programs provide an influential means of coordinating the home, the school, and the world of work in behalf of the student. (Batter and York, 1971a, pp. 2-3)

A University of Minnesota Guide for Cooperative Vocational Education (1969) describes cooperative work experience programs as a better application for learning:

One of the most visible values of cooperative vocational education is the opportunity for better application of classroom learning to a real-life test. This value is particularly important in the development of the capabilities needed for good occupational adjustment. Simulated occupational environments rarely provide a laboratory of real-life employers and employees and seldom one with real-life customers or clients.
(p. 3)

This guide also lists six advantages of cooperative vocational education programs. They are:

- Cooperative vocational education provides probably the most relevant curriculum and instruction for students with vocational goals because it is designed to respond to students' needs and occupational requirements.
- Cooperative vocational education provides for application of most vocational learning because there is almost immediate opportunity for try-out in real-life situations.
- Cooperative vocational education provides balanced vocational preparation including manipulative and technical skills. It is sensitive to occupational adjustment and career development needs because of the continuous feedback from training sponsors and others.

- Cooperative vocational education is well-equipped to prepare students with wide variances in abilities for a broad range of occupational fields. Its only limitation is the number of potential training stations available in an occupational field.
- Training more students than can be employed does not occur in cooperative vocational education because participation is limited to students who can be placed in cooperative training stations. There are other manpower control features such as the occupational survey and advisory committee.
- Close community relations are a necessity in cooperative vocational education because of its dependence on the community for job placement and on-the-job instruction.

Federal legislators have discussed the advantages of cooperative work experience programs. Congress made the following statements about cooperative vocational education in Section 171 of Public Law 90-576:

The Congress finds that cooperative work-study (Vocational Education) programs offer many advantages in preparing young people for employment. Through such programs, a meaningful work experience is combined with formal education enabling students to acquire knowledge, skills and appropriate attitudes. Such programs remove the artificial barriers which separate work and education and, by involving educators with employers, create interaction whereby the needs and problems of both are made known. Such interaction makes it possible for occupational curricula to be revised to reflect current needs in various occupations. (p. 23)

Also, the Committee on Labor and Public Welfare of the United States Senate had this to say about the advantages of cooperative work experience programs:

The part-time cooperative plan is undoubtedly the best program we have in vocational education. It consistently yields high placement records, high employment stability and high job satisfaction. Students cannot be trained faster than they can be placed. The availability of training stations with employers is limited to the needs of the employer (1968).

An economic advantage of cooperative work experience programs is that a small school in a diversified community can provide a broad range of vocational education at nominal cost using cooperative work experience programs instead of laboratory-based programs (Evans, 1971, p. 107).

Rupert Evans claims that the occupational advantages for cooperative work experience programs have been demonstrated by studies of vocational education graduates. This research has shown that these graduates get their first job sooner after leaving school, earn more money per hour, and are employed more hours per year than comparable graduates of other secondary curricula (1971, p. 104).

LIMITATIONS AND PROBLEMS RELATED TO COOPERATIVE WORK EXPERIENCE PROGRAMS

Cooperative work experience programs may encounter several limits to their success. Many students are unable to participate in a cooperative work experience program because of a variety of

restrictions. Some of these restrictions are local and school oriented, some involve federal laws, and still others are imposed by the local state educational systems. In addition, local and national labor union regulations often impose restrictions.

(Butler and York, 1971, p. 3). However, through the involvement of the school, parents, students, employers and other appropriate individuals in planning and running the cooperative work experience programs, most potential limitations can be overcome and eliminated (Butler and York, 1971, p. 3).

Several limitations and disadvantages of cooperative work experience programs are listed by Cushman (1967), Evans (1969a), Griessman and Densley (1969), Huffman (1967a), McCracken (1969) and Wallace (1971a).

Some of these limitations and disadvantages are:

- Sometimes the number of courses required for graduation by the local school exceeds the state requirement and this limits the opportunity for students to take elective cooperative work experience program subjects.
- Union membership and apprenticeship requirements may reduce the type and availability of jobs in some communities. Leaders of labor unions and apprenticeship programs should be included in the planning stages and as advisory committee members to assure that the cooperative work

experience program supplements and strengthens existing programs in the community, rather than competing with them.

- A primary difficulty has been the shortage of qualified teacher-coordinators.
- Cooperative work experience program students may be laid off from their on-the-job training sessions because of minor economic recessions. In such periods the rapid response of cooperative work experience programs to labor market demands appears as a disadvantage rather than an advantage.
- Cooperative work experience programs may be difficult to establish in communities with a narrow range of available training stations, declining population, and high rates of employment in declining occupational endeavors.
- The tendency to exclude training which has not been a part of traditional vocational education programs may restrict opportunities in new and emerging occupational areas.
- Employers tend to expect productivity from cooperative work experience program students, while the student and his parents expect on-the-job training station activity to have educational significance.

- Special difficulties are involved in the operation of cooperative work experience programs in large cities. Travel time for teacher-coordinators is a problem since it is rarely possible to restrict students to placement in a particular geographic sector of the city.
- Findings indicate that on-the-job training programs can be too narrowly conceived unless care is exercised to insure that students are moved through a planned sequence of skill development. Cooperative work experience students should have the opportunity to have meaningful jobs leading toward career-cluster mobility. An important feature of mobility is that the student-trainee should not be aimed toward a particular job for a lifetime. Mobilization should be upward progression and horizontally conceived for the maximum benefit to the student.
- Child labor laws established by the U. S. Department of Labor, as well as state and local labor laws, will influence program planning. Exceptions to some of the laws are granted to student-learners enrolled in bonafide cooperative work experience training programs. The latest information on child labor laws and approval procedures regulating cooperative work experience programs must be obtained from the local, state and federal sources.

Cooperative work experience programs have often been opposed by teachers of vocational subjects who are accustomed to teaching in a school laboratory environment. They appear to be concerned that the development of cooperative work experience programs will take students from their classes, thereby decreasing the enrollment in their programs. In order to alleviate this concern some schools have imposed restrictions on cooperative work experience programs, such as limiting them to occupations not already covered in the school vocational education program laboratories. Other schools have restricted students to the schools' vocational education programs laboratories until the last semester before graduation. In this manner, the vocational education instructor can then be used as a part-time cooperative work experience program coordinator. In still other schools, the permission of the vocational education program instructor is required before a student can be assigned to a cooperative work experience program in the occupational area of the instructor (Evans, 1971, p. 199).

Dr. Rupert Evans (1971, p. 199-200) claims that some vocational educators in state school administration make clear their individual opposition by establishing regulations which restrict cooperative work experience program coordinators from working in areas outside the area of vocational specialization. In this manner coordination extending across two or more areas of the traditional fields of vocational education is prevented and the scope and population of the cooperative work experience programs is narrowed.

Dr. Evans (1971, p. 199) also states that cooperative work experience education programs are often opposed by individuals who believe that instruction must be given entirely inside the walls of the school. Evans goes on to say that almost every administrator of cooperative work experience programs has had calls from local citizens as well as teachers asking why faculty members and students are off the campus during school hours.

Gerald O. Bryan, in his article "Give Students a Career Instead of a Job" (1964, pp. 32-33) describes how cooperative work experience programs can cause a student to regard his job as a dead end. Bryan claims that the problem occurs because the training station teaches specific duties and does not teach the interrelationships that exist between these duties and other jobs within the occupation.

The charge has been made that vocational education programs frequently teach obsolete processes, using outdated equipment. This problem need not be a concern of cooperative work experience programs, if a major part of the learning experience is provided for by employment in an actual on-the-job situation. It may be true that in many schools the vocational programs are operated with outdated curriculum and obsolete equipment. But a business, in order to remain in operation, cannot allow its methods and facilities to fall very far behind the latest trends. In this manner, a student employed in a learning situation with any operational business or industry will almost always receive the

latest and most up-to-date information and skills (Evans, 1971, p. 106).

As important as specific occupational skills are, Gyspers and Moore (1968) claim that teacher-coordinators of cooperative work experience programs do not do enough to help students see the impact that the psychological and social dimensions of their work experiences will have upon their future occupations. The teacher-coordinators need to recognize the values a trained counselor can have on increasing the valuable contributions, besides skill training, that cooperative work experience programs can have for the individual student.

EMERGING ROLE OF COOPERATIVE WORK EXPERIENCE PROGRAMS AND CAREER EDUCATION

In a speech titled, "Educating for the Real World," former Commissioner of Education, Sydney P. Marland, Jr., made the following statement:

For a variety of reasons, vocational education has not made it in America. Our high schools have not been able to make sure that every young man and woman who receives a diploma is qualified either for immediate employment or further education (Marland, 1971).

According to an article written by Dr. Robert J. Havinghurst, the secondary school system in America is failing to meet the needs of a large majority of students in attaining the competencies required to become an accepted member of our society. Dr. Havinghurst defines "three broad groups of adolescent youth whose potential for achieving adult competence is so far from being realized

that they constitute a social problem." They are 1) the social disadvantaged and educationally maladjusted adolescent; 2) the underdeveloped and underachieving adolescent; and 3) the potentially superior but uncommitted adolescent. Of the first group, approximately one-third drops out without completing high school. Unfortunately, Dr. Havinghurst does not feel that most of these individuals will ever fully recover whatever potential they had at birth. He suggests remedial programs which concentrate on reading and arithmetic, and cooperative work experience programs as examples of programs which show value for helping these individuals. Cooperative work experience programs could be used for developing the potential of the second group. Statistics indicate that "really-based" programs for these students have the potential of helping about three-fourths increase their achievement rate. For the third group, he suggests an education program, such as cooperative work experience, in order to build "social fidelity as well as self-confidence" (Havinghurst, 1966, pp. 75-96).

Along these same lines is the increasing amount of rebellion and demands for "relevant" education by secondary students. Arthur L. Stinchcombe, in his book, Rebellion in a High School (1969, p. 71) attributes this unrest to a perceived lack of a connection between existing school curricula and the occupational future of the students. A suggested method of alleviating these problems is programs such as cooperative work experience.

In support of this claim, Rupert Evans (1971, p. 143) points out that if education appears to the student to be personally relevant, they are unlikely to rebel and strike out against the school. Cooperative work experience programs claim to meet the relevant needs of the individual students. It has become imperative that secondary programs provide experiences which will help the students identify their talents, relate those talents to the world of work, identify an occupational interest, and develop such talents as will widen their choices and improve the skills required for success. Cooperative work experience curriculum is looked upon as a solution to this problem. Two important considerations of cooperative work experience curriculum goals have been the individual needs and motives of the students as well as the occupational prerequisites of employment. The unique and dual purpose of the cooperative work experience curriculum is to produce satisfied and satisfactory workers, a condition which may improve job satisfaction, productivity, and occupational tenure. Cooperative work experience curriculum can satisfy the needs of learners in their vocational development as well as the needs of employers in a competitively productive environment, with the ultimate goal of producing competent workers and citizens (Swanson, et al., 1969, pp. 22-24).

Jack Abrahamson suggests that in order to make career development the objective of cooperative work experience in distributive education programs, there must be a close relationship between a

a related class and the training station. In the related class there must be built a realistic image of work, a proper occupational perspective and the opportunity for self-appraisal (Abrahamson, 1963). Gail Trapnell (1965, p. 31) states that regardless of a student's occupational objective, four competencies are essential for his initial and continued employment: social competencies, basic skill competencies, technological competencies, and specific occupational competencies in a specific job.

Evans (1971, p. 270) says that research data from many studies indicates that half of all the students entering secondary school would like to be enrolled in a vocational education program. The important problem is that there is room at the present time for only about one-fourth of these students. The number of students who want to take vocational education courses is certainly going to increase more rapidly than the supply of available programs. Cooperative work experience programs appear to be a significant solution to this problem.

But even in vocational education laboratory programs the competencies and values of our work ethic are usually absent. Unless the student is employed, lives on a farm, or is involved in an interesting employment simulation program, he has very little exposure to the ethics of work. The work ethic and its accompanying competencies of related vocational values from a major production of untaught curriculum in our secondary schools. Cooperative work experience programs are capable of providing these

needed experiences (Evans, 1971, p. 90).

According to Evans (1971, p. 275) the future should see cooperative work experience programs expanded in size and number. He believes that work-study programs should be rapidly converted into cooperative work experience programs so that the educational and employment goals can be coordinated. Truck driving, heavy equipment operation, and other similar occupations which require large capital investment and operating costs can be handled quite easily with cooperation between school and industry. Additions of courses in such occupations would greatly increase the typical secondary school offerings. In smaller schools which cannot afford specialized cooperative work experience program coordinators for several occupational fields, the trend should be toward the hiring of coordinators who are qualified to serve the vocational education needs of students in many related occupational fields.

RELATED RESEARCH AND FINDINGS

A study of the literature in cooperative work experience reveals a need for a more thorough investigation of the actual programs themselves. Educators are divided in their opinions about the relative worth of such programs and the findings of studies are inconclusive.

The U.S. Panel of Consultants on Vocational Education (1963) has called for national data with which to analyze and appraise all vocational education programs, including secondary cooperative work experience programs.

The U.S. Senate Committee on Labor and Public Welfare (1968) found that, nationally, few secondary schools had organized programs for systematic follow-up of students after graduation. The committee has recommended that the definition of "vocational education" be changed and expanded to include responsibility for vocational education program student follow-up and program evaluation.

It is interesting to note that William J. Schill (1967), in his study of cooperative work experience programs, found that the accepted definitions of the program were nearly identical for almost every state in the union. This was also verified in the review of the literature for this study.

Jerome Moss, Jr., (1967) developed a tentative model for conceptualizing the role of evaluation as a method in the process of change in educational programs. He has made the observation that:

One of the most critical aspects of program evaluation, and the one which thus far probably received the least attention, is the identification and measurement of the program outcomes which are to serve as evaluative criteria. Everyone affected by evaluation, and that is all educators, must be concerned with developing as complete an array of relevant potential outcomes as possible for use by evaluators (p. 1).

Another important point that Moss has made which applies to this study is that criteria should evaluate program outcomes rather than program characteristics. Moss stated that the need exists for development of new approaches and procedures in program evaluation. His suggested needs include formative evaluation,

expert and self-evaluation, follow-ups, experiments, interrupted time series, and regression analysis.

Butler and York (1971a, pp. 9-10) state that it is essential for the local schools to engage in evaluative research activities in order to design, operate, and improve cooperative work experience programs. Accordingly, findings of properly constructed and planned research projects will provide the necessary sound basis for adopting unique methods, expanding programs, and adjusting operating budgets.

Some of the major components that should be evaluated in cooperative work experience programs are:

- General program goals.
- Effectiveness of related classroom instruction.
- Effectiveness of on-the-job training.
- Follow-up studies on the effectiveness of cooperative work experience programs as perceived by student-graduates.
- Effectiveness of guidance and placement service.

Harold R. Wallace (1970a, pp. 90-93) states that techniques and instruments for the evaluation of instruction of cooperative work experience programs are greatly needed because of the unjustified lack of these materials. Wallace believes that certain important research topics have been avoided, "either because they are too threatening or because they appear to be too difficult to study" (p. 91). One of the examples he uses is the evaluation of the

actual cooperative work experience program impact upon the occupational experiences of the student-learner. Wallace found that administrators of the cooperative work experience programs are increasingly being expected to justify program objectives, "and to produce a continuing flow of evidence concerning the quality and quantity of achievement" (p. 93). The development of the needed research procedures and techniques reveal that the existing objectives are unsatisfactory because of overlooked characteristics and intellectual behavior of individual students (p. 91).

A study of the concerns and expectations of participants in cooperative work experience programs was done by Harold Cushman (1967). He found that both students and their parents were concerned about whether or not the objective of cooperative work experience would in reality have educational value. Students and parents expected:

- specific training for an occupation.
- academic credit for cooperative work experience.
- varied and interesting assignments.
- at least the minimum wage.
- experience leading to further training.

The employers' expectations and concerns were quite different from those of the students involved in cooperative work experience programs. The employers wanted students to be productive workers. They also wanted to determine which students would be placed in their businesses. They expected the students to have:

- the ability to perform a variety of tasks.
- good work habits.
- desirable personal attributes.

The employers also wanted the local schools to provide.

- specific occupational training for a specific job.
- effective coordination and a coordinator who could solve problems.
- scheduling of time so that the productivity and effective work performance of the students would not be hindered (Butler and York, 1971c, p. 12).

This study brought out the paradox and most serious potential defect of cooperative work experience programs. It showed that the employers wanted students to be essentially part-time workers and expected effective job performance and productivity. They wanted students to be ready to be hired. The students wanted the experience to be of educational significance and to learn the skills on the job that the employers expected them to have when they were first employed (Butler and York, 1971c, p. 12).

Wallace (1970b) acknowledged that existing problems result in cooperative work experience programs that attempt to meet the needs of the employers rather than the students.

Too often the cooperative program coordinator places the expectations and concerns of the employer highest in priority. The result is that the student is placed on a training station which may provide little opportunity or meaningful learning activities. If the learning opportunities are available, chances are the employer will not take the initiative to structure the learning situation and the

student will not have full advantage of the opportunities which are available (p. 12).

He further states:

If the cooperative vocational program is to offer more for the student than he would get through a combination of casual part-time employment and traditional classroom instruction, the employer must accept the role of a training sponsor, viewing a student as a trainee to whom he has a commitment and not merely a part-time worker. This concept of a partnership involving the school and the employer in an educational endeavor is essential for the development of cooperative vocational education programs (p. 12).

A review of the research publication by David McCracken (1969) summarizes the major strengths of cooperative work experience programs. His findings are:

- Cooperative work experience programs have a favorable cost-benefit ratio.
- Cooperative work experience programs generally show a good flexibility of scheduling and operation.
- Cooperative work experience programs provide a broadening of occupational offerings.
- Cooperative work experience programs provide good job-oriented training.
- Cooperative work experience programs show a reduction of unemployment among those students who complete the program.
- Cooperative work experience programs develop a good work reputation in students.

- Cooperative work experience programs improve student motivation.
- Cooperative work experience programs demonstrate an improvement in school-industry cooperation.

Some factors limiting program success found by McCracken include:

- Relative improvement of work attitudes and behavior.
- Lack of congruence of jobs with student interest and aptitudes.
- Little employer concern for student educational development.
- Discrimination by employers.
- A lack of awareness of the purposes and objectives of the program.

A doctoral study done by Carmela C. Kingston (1970) on the effectiveness of cooperative business programs came to these conclusions:

- Cooperative office education programs benefited those students who wanted to begin working immediately after high school.
- Cooperative office education programs appear to have an effect on salary increases received by beginning workers.
- A high degree of job satisfaction was indicated by the cooperative students.

- Employers were better satisfied with those beginning office workers who were cooperative office education graduates.
- Cooperative office education did not appear to have a significant effect on the quantity or quality of work performed by the beginning office workers.

A study done by Leonard F. Robertson (1965) on the effects cooperative work experience programs have upon beginning employment support the previous study. Robertson concluded:

- The cooperative program was beneficial to those students who wanted to begin working immediately after graduation from high school.
- The work phase of the cooperative work experience program was not considered by this study to be primarily a learning experience.

Roger J. Wilson (1970) made a study of the effectiveness of the preparation of on-the-job trainers and came to the conclusion that the on-the-job employer was given little if any planned preparation before he undertook his teaching task.

Rupert Evans (1971) stated that most studies report that the graduates of secondary vocational curriculum have a higher job satisfaction compared to graduates of other secondary programs who do not go on to college. He states:

It seems likely that as the world of work becomes increasingly complex, technical competence is going to be increasingly involved, and this will lead to continued high job satisfaction (142-143).

Norman B. Eisen (1966), in his study of cooperative work experience programs in California high schools, found:

- Cooperative work experience programs as offered in California are meeting many of the objectives which have been attributed to them on the whole and participating students believe they are learning and benefiting from the program.

Eisen goes on to say that providing opportunity for cooperative work experience program graduates to evaluate the work experience is not common. In most cases, this valuable tool for program appraisal is not currently an integral part of the total operation. He also offers the conclusion that in too many instances there is a lack of planning of on-the-job learning experience.

Max U. Eninger (1965) evaluated the processes of secondary level vocational education programs in the United States. He found that the relatedness of the first job to the occupation studied is the keystone criterion variable. He reported that those students who enter occupations the same as or slightly related to the occupation studied in school do better on the average as opposed to those students who enter unrelated occupations. Eninger concludes that the most fruitful areas for school efforts to improve their percentage of vocational education graduates placed into the field for which they were trained are:

- improving school placement services;
- improving the percentage of "recommendable" vocational education graduates by matching the capabilities of

- the vocational education student with the requirements for program success;
- transferring of students who cannot meet the course requirements to a more suitable course for early remedial efforts.

Jesse W. Ullery (1971) did a study of the characteristics of students excluded from cooperative work experience programs. The major conclusions of his study are that the characteristics of students excluded overtly or covertly from the cooperative work experience programs strongly suggest that many students were denied admission on the basis of such factors as:

- socio-economic class;
- race;
- age;
- sex;
- drop-out proneness;
- similar or related factors.

Ullery also noted that students excluded from cooperative work experience programs are those who most need the programs.

The U. S. Bureau of Labor Statistics (1960) did a study of the early employment experiences of secondary school leavers (both graduates and drop-outs). The following is a brief summary of the findings that have a relationship to this study:

- It is not accurate to think of school leavers, either drop-outs or graduates, as a homogeneous

group. Rather, they are characterized by innumerable personal differences.

- Completion of vocational education programs by the school leavers appeared to have little effect on the type of entry jobs they were employed in. Graduates and drop-outs did not differ greatly in this respect. The question was raised as to whether or not it is practical to plan vocational education programs based upon local manpower needs as forecast by local employers.
- The majority of school leavers who had remained in the local areas and were surveyed had entered the labor market. About three-fourths had obtained jobs fairly quickly. Of this group, more than one-half of the graduates and two-fifths of the drop-outs actually found jobs in less than a week after beginning to seek employment.
- Among the school leavers interviewed, a substantial proportion of the entry occupations of both graduates and drop-outs were in unskilled labor. As might be expected for inexperienced workers, many first jobs were of the type where advancement seemed limited. In many areas a sizeable proportion of school leavers were found in semi-skilled factory jobs.

- In the cases of male student leavers, military service often appeared to be a substitute for civilian employment. One-third of the male population of the study were found to be or to have been in the armed services.
- Approximately 60 percent of all the student leavers surveyed who were employed at the time of the interview were still on their first job.
- When asked how the school could have been more useful in meeting their needs, nearly one-fourth of the school leavers expressed an opinion suggesting more vocational counseling.

In 1959, the U. S. Office of Education did a follow-up survey of vocational, trade and industrial full-time students as well as cooperative work experience students. The study was descriptive in nature and primarily concerned with the placement status of the students. The following is a brief summary of some of the findings and conclusions pertinent to this study.

- Approximately 70 percent of these graduates available for employment were placed in occupations for which they were trained or in other closely related occupations.
- The other 30 percent were found to be either employed in occupations not related to their training experiences, unemployed, or unaccounted for.

- About 18 percent of all the graduates that were in occupations outside of the occupation they were trained for appeared to be so situated because:
 1. They changed their minds about the occupation they wished to enter, or
 2. The practice in some industrial areas is to place beginning workers in a general labor pool.

Important findings concerning the graduates of cooperative work experience programs for the same study are:

- The percentage of placement was higher than that of the trade and industrial program graduates because the cooperative work experience program student was already connected with industry before graduation.
- The average hourly rate for the graduates of the cooperative work experience programs was 10 percent less than for the graduates from the regular vocational education program.

A study done by C. Darl Long (1941) has some important implications for this study. The following is a summary of the findings that have a bearing on this study.

- There is no significant association between school recorded intelligence scores for high school students and tenure of employment.

- Youth from homes broken by death, separation or divorce do not differ significantly in percentage of time employed from those students whose homes are intact.
- Sons of native-born parents exceed all others in regularity of employment.
- Age at school-leaving, semesters completed, average English marks, number of extra-curricular activities engaged in during the last two years at school, times tardy, and times absent are not associated significantly with tenture of employment.
- Students who had courses in occupational information and group guidance excelled in percentage of time employed over those who had not had such courses. The differences were significant at the 5 percent level. Individual counseling, such as that the students had in high school, regardless of type, showed no significant association with percentage of employment.
- Neither the number of different jobs held since leaving school nor the beginning wages received on the first full-time job after leaving school is associated with the percentage of times employed since leaving school.

- Students who took their first job after leaving school because of interest in the type of work exceed all others in percentage of time employed.
- The youths who, in their first job, were employed by their parents, exceeded, to a reliable degree, all others in percentage of employment. When this group is eliminated from the sample, however, the method of securing first jobs shows no association with tenure of employment.

Walter C. Brown (1953) compared the relationship of the vocational training received by former students of diversified occupational programs to their employment status five years after leaving school. He found that approximately 39 percent of the former students were employed in the occupation for which they had been trained. Another 14 percent were in occupations directly related to the areas they were trained in.

In his study of the occupational experiences of vocational high school graduates, Regis L. Leonard (1950) found that less than one-half of the graduates obtained employment in occupations for which they were trained. Leonard recommends a more positive approach of follow-up procedures in order to replace the trial and error program basis so commonly used.

In 1953 H. H. London did a follow-up study of vocational trade students five years after they completed their programs. He found that 42.5 percent were employed in the occupations for which they were trained and 12.6 percent were employed in related occupa-

tions. Another 44.9 percent were employed in unrelated occupations. Some other pertinent findings of London's study which are related to this problem are:

- the most important factor influencing students to enroll in vocational programs was previous experiences, and
- vocational programs need not only improve the occupational guidance programs, but also need to add cooperative work experience programs to their curriculum.

James T. Vogeley (1958) investigated the occupational experiences of distributive education program students versus the non-distributive education program students. He found that the majority of distributive education students did not remain in the field for which they were trained. Students untrained in distributive education were employed in distributive occupations with a greater frequency and for longer periods of time than the students trained for employment in those occupations.

In 1946, Harold J. Dillon conducted a survey of work experience programs. He found that the work experience programs appeared to have a greater holding power with students. He claims that in some instances, nearly 60 percent of the students enrolled in work experience programs would have dropped out of school had it not been for the program. He also found that employers believed that the work experience program provided the students with the

opportunity to sample different types of occupations before selecting a final vocation.

In another publication, Dillon (1949) makes the following recommendations for a vocational education program:

- A relationship should be established between education and life.
- Proper occupational information must be provided for all students.
- Students should be assisted in selecting courses based upon their individual needs, interests, and aptitudes.
- Vocational counseling must begin during the elementary school years.
- Parent interest and cooperation must be increased through direct participation

Howes and Plattee (1959) supported the cooperative work experience programs when they found that students' occupational choices were influenced by their "liking" a particular vocational subject and/or by observing people at work on the job.

Harold R. Wallace, in his book Review and Analysis of Instructional Materials for Cooperative Vocational Education (1972) finds that cooperative vocational education programs appear in many forms, based upon the existing conditions and requirements found in the local occupational fields that the program operates in. But at the same time all cooperative vocational education programs share as a fundamental approach to education and occupational training

the combining of formal educational experiences with actual on-the-job employment situations. It is naturally assumed that the two coordinated learning activities will be "mutually reinforcing and enriching." Also according to Wallace (1972) there appears to be a substantial agreement that there exist specific general topics that are important for all students enrolled in cooperative work experience programs no matter what areas of occupations they are interested in. A review and synthesis of these topics was developed by a national conference on cooperative work experience in 1969 at the University of Minnesota (p. 48).

These topics are:

Occupational Adjustment Capabilities

- Learning how to learn on the job.
- Interacting with co-workers, supervisors, and employers.
- Participating in worker groups as a member and leader.
- Developing desirable work habits and attitudes.
- Making rational decisions about employment and personal economics.
- Preparation for the jobs ahead.
- Managing work and leisure time.
- Keeping abreast with current developments in the occupation.
- Others drawn from the environment where the occupation is found.

Career Development Capabilities

- Assessing and analyzing one's own needs, interests, abilities and aspirations.
- Assessing and analyzing the potential opportunities and satisfactions of an occupational field (cluster).
- Predicting one's own chances of being successful and satisfied in the occupational field (cluster).
- Making decisions and plans to achieve goals and aspirations.

Also consumer economics needs to be included in the non-vocational content of cooperative work experience programs. This would include topics such as personal money management, insurance, practical law, and taxes (Wallace, 1972). An apparent reason for including this material in a cooperative work experience program even though it does not appear to directly relate to the occupational training is demonstrated as follows:

In trade and industrial education we are preparing you to earn money. Therefore, we feel compelled to offer you guidance in learning situations in the area of socioeconomics. Many of the subjects presented have been covered by other courses in high school, but it is believed that this review and its practical application as it applies to today's society will be of much help. (Smith, 1965)

It has been the delegated duty of the cooperative work experience programs related classroom instruction to provide for these basic topics. It is this related instruction that provides the common learning experience that are designated as being needed

by all students enrolled in cooperative work experience programs regardless of their occupational training areas. Mason and Haines have called this part of the cooperative work experience curriculum the "basis related instruction." (1965, p. 93) They cite the term "specific related instruction" to define the learning experiences needed by an individual student to prepare him for selected occupations.

In order to provide basic related instruction to individual students enrolled in a cooperative work experience program, it is necessary to take into consideration: 1) the capabilities and competencies needed by all workers; 2) those which are common to an occupational field; 3) those competencies which are common to specific occupations; and 4) those competencies which are specific to the job a student is learning to perform at his training station (University of Minnesota, 1968, p. 48). What is now desperately needed according to Wallace (1972) is massive research in order to determine specifically what kinds of competencies are needed by students enrolled in cooperative work experience programs, that will better prepare them for their chosen occupations. These studies need to be more than just follow-up studies of work adjustment and career development, but must also cover the full array of technical and social competencies.

Budke and Miller (1973) claim follow-up studies of vocational program students need to be an integral part of all vocational education programs. It is through the knowledge gained by these

studies that educators are better able to improve existing vocational education programs as well as to give ongoing services to former students. The follow-up study can be used as a means of providing continued career development and modification of career development patterns of these former students. The authors go on to state that the best information for evaluating the adequacy of vocational programs is derived from former students that are currently employed. Measuring the success and failure of these students can provide information that will clearly demonstrate program strengths and limitations as well as identify additional program needs.

Follow-up studies involve the systematic collection of data from former vocational program students according to Budke and Miller. This can be used for:

- evaluating the effectiveness of students' preparation for employment,
- determining the relevance and adequacy of the vocational education program for the employment market and needs.

A vocational student follow-up study is a collection of information which can be used to evaluate the effectiveness of the job training experience and its results. It can then be used to provide data to:

1. Provide job placement and job competency information indicating needed curriculum modifications and changes.

2. Provide student satisfaction and job skill information useful in evaluating vocational education instructional methods and processes.
3. Provide descriptive information about various jobs useful in gaining students into a training program compatible with their interests and abilities.
4. Provide job training information which suggests instructional staff retraining, expansion or reassignment.
5. Provide information about skill training requiring new or additional equipment and facilities.
6. Provide information about student needs for additional education and training.
7. Provide information necessary in determining the cost-benefit of the vocational education program.
8. Provide information useful in evaluating the effectiveness of the vocational guidance program and to measure the demand for special need programs. (Budke and Miller, 1973)

The data gained by an evaluative follow-up of cooperative work experience program graduates can be used:

1. As a basis for modification of the curriculum in terms of graduate employment and job skill information.

2. As a basis for modification of the stated goals and objectives of cooperative work experience programs in light of the actual results and determine needs for revision of these as deemed necessary.
3. To show employment trends and job mobility of cooperative work experience program graduates.
4. To determine additional education experiences that may be needed by cooperative work experience program students.
5. To determine the effectiveness of the guidance services provided by the cooperative work experience program.
6. To justify the continued existence and expansion of the cooperative work experience program.
7. To show legislative committees the effectiveness of cooperative work experience programs.
8. To upgrade the public understanding of cooperative work experience programs.
9. To validate the goals and objectives of cooperative work experience programs as they now exist in Oregon.

Budke and Miller go on to say that in order to achieve the above tasks, cooperative work experience programs must be evaluated in terms of their objectives - each cooperative work experience program area must be covered. Decisions concerning cooperative work experience program adjustments can be based only upon

evaluation data secured in terms of the program's ability to achieve its original objectives. Kan Yagi et al (1971, p. 17) supports this position when he states that, "The evaluation of any educational system, in its entirety or in parts, begins with a study of its objectives." He goes on to say that if the objectives of a program are "deemed appropriate, desirable, and within the realm of achievement," then it becomes necessary that the educational system needs to be evaluated in terms of its accomplishments.

The "Guide for Cooperative Vocational Education" (University of Minnesota, 1969, p. 110) states that in order to do a follow-up study of cooperative work experience programs, evaluative criteria must be derived from program objectives. Cooperative work experience programs need to be evaluated in terms of student outcomes and the effects of the program on local manpower conditions, as well as on program characteristics and operating practices. It is necessary to describe and measure program objectives, as well as the student outcomes, in order to determine what combination of these factors achieves the desired program goals. Presumably, there is a relationship between the presence of certain objectives and outcomes, even though research is needed to verify this relationship.

As the results of some research done by Moore and King (1972) they identified problem areas that need to be further studied in order to assess the process as well as the product of vocational education. It is interesting to note that some of the important

problem areas they identified relate directly to this study. They are:

- Cooperative work experience program effectiveness.
- Learning experiences.
- Effects of programs on the students.
- Student success in training for, entering, into maintaining and advancing in an occupation.
- The effectiveness of work experience in occupational programs.

Jerome Moss, Jr., (1968) states that the only criterion by which instruction of programs can be evaluated is the outcome of product of instruction. He goes on to say:

Almost none of our cherished 'principles' of vocational education practice have been empirically validated. They have about as much scientific status right now as old wives' tales. Many of them, in time, may prove to be pedagogically sound. But the point is that they remain to be proven. (p. 6)

In order to provide the empirical evidence that could be used to validate cooperative work experience programs, Mason and Haines (1972) claim that the answer to the question, "Have the objectives (goals) of the program been realized?" must be found (p. 9).

Dr. Carl Schaefer (1973, pp. 24-25), in an article on accountability of vocational education, claims that vocational educators, by profession, are inherently accountable. Accountability is inbred into the kinds of things that vocational

educators teach. He goes on to state that their one sin is of omission - a failure to critically inspect the product turned out. As a solution, he recommends internal monitoring and external follow-up. Cooperative work experience programs already provide for on-going internal monitoring through the regular scheduled visits by the coordinator to the work stations to discuss with both the students and the employer the progress of the learning experience (Atteberry, 1973). What is needed now is follow-up evaluations to determine program accountability.

GOALS AND OBJECTIVES OF COOPERATIVE WORK EXPERIENCE

The above review of literature has disclosed a general agreement nationally as to acceptments of the identified instructional goals and objectives of cooperative work experience. The stated goals and objectives of cooperative work experience programs seem similar nationwide.

Attempts made to identify instructional goals and objectives for cooperative work experience programs has been going on for quite some time. Over twenty years ago Ivins and Runge (1951) set down the following seven primary objectives for high school cooperative work experience in order of their importance and desirability in a general education program:

- Promoting good student attitudes toward work.
- Promoting good student work habits.
- Encouraging desirable traits of character.

- Promoting feelings of self-respect and achievement in students.
- Promoting cooperative attitudes in students.
- Promoting student guidance including some vocational preparation.
- Making possible a limited supervised introduction of students to activities and demands of the normal work world (p. 99).

Ivins and Runge (1951) also establish a set of secondary objectives of the vocational goals of cooperative work experience programs:

- Promoting good employee-employer or worker-work supervisor relationships.
- Developing job intelligence and imagination in student workers.
- Developing student competence in the management of personal finances.
- Developing specific vocational skills in students.
- Motivation of school non-work general education experience programs.
- Developing interest in the schools regular or non-work experience program in those students who respond best or only to real-life situations.
- Developing general elementary vocational skills.

These goals and objectives seem to have been based upon the purposes of vocational education as well as on the federal definition of cooperative work experience. The 1968 Amendments list two primary goals for all vocational education programs including cooperative work experience:

- Developing the individual's skills so as to enhance his employability not only when he leaves school but also throughout his work life.
- Providing the opportunity to improve the individual's employment status and earnings and help him adapt to a changing economic environment. (Notes and Working Papers Concerning the Administration of Programs Authorized under Vocational Education Act of 1963, Public Law 88-210, as Amended [Washington, D. C.: U. S. Government Printing Office], 1968).

An Eric Guide to Work Experience Education Programs (1968) lists goals and objectives for these programs based upon research and review of ongoing programs. The ones that appear to have universal acceptance for cooperative work experience are:

I. Occupational Preparation Goals

A. Objectives

1. Exploration of a variety of work opportunities and working conditions.
2. Adjustment to fellow workers, the immediate foreman or supervisor, and the employer.

3. Familiarity with the complexity of tasks that comprise a job.

4. Employable skills.

II. Self-Understanding

A. Objectives

1. Discovery and recognition of individual aptitudes and interests.

2. Identification of satisfactions to be derived from work.

3. Recognition of suitability or lack of it for an occupational field.

If all the variations of cooperative work experience programs in American schools could be viewed as a whole, a series of controlling goals could be synthesized, according to Mason and Haines (1972). These goals and objectives are:

I. Vocational Goal

A. Provide general occupational training.

1. Form work habits and attitudes.

2. Understand employer and co-workers.

3. Train for an area.

B. Provide specific occupational training in skills, knowledges, judgments, understandings, and attitudes.

II. Social Development Goal

A. Provide social experiences

1. Appreciate dignity of labor.

2. A-preciate economic order.

3. Understand adults.

- B. Develop emotional stability

1. Independence from parents.

2. Self-confidence.

3. Sense of "belonging".

4. Personality and character development.

- C. Aid in selecting vocation

1. Try-out of interests.

2. Self-analysis.

3. Discovery of talents.

III. Drop-out Reducing Goals

- A. Earn money

1. To continue in school.

2. To keep social standing.

- B. Cure maladjustment

1. Failure elsewhere.

2. Low I.Q.

3. Behavior problems.

- C. Control employment

1. Control placement.

2. Control hours.

3. Control working conditions (Mason and Haines, 1972, p. 23).

The national goal is primarily concerned with the general and specific occupational training of students. Goal II, Social Development, is generally perceived as meeting the general education needs of students. Goal III, Drop-Out Reducing Goal, is seen as a method of retraining in school those students who may drop out before graduation.

SUMMARY

The necessity and value of cooperative work experience programs, as compared to other methods of instruction, has not been proven by research. However, reported experience and several research studies spanning three-quarters of a century have revealed that cooperative work experience programs could extend and expand the learning environment for participating students. Cooperative work experience goals and objectives provide for experiences that prepare the student for occupational flexibility and adjustment. The question that needs to be answered now is whether cooperative work experience programs provide the experience required to meet their stated goals and objectives, and if so, what real effects are these experiences having upon students' occupational endeavors. Such information will assist educators and career planners in assessing the true merits of the cooperative work experience programs being implemented in Oregon and nationwide.

The related information and methodology researched in the review of the literature was used to identify methods that were

employed in the development of this study and the resulting questionnaire. The actual construction of the questionnaire used by this study, and the methods of its administration, was based upon information obtained from the review of the related literature.

CHAPTER III

THE DESIGN OF THE STUDY AND PROCEDURES FOLLOWED

SELECTION OF THE PROBLEM

An awareness of the need for knowledge of the actual results of high school cooperative work experience program instruction on the part of concerned educators has led to the selection of this problem for research. This need has long been demonstrated by a number of educators and administrators at both the state and national level. This fact was thoroughly discussed in the review of the related literature (Chapter II).

With the advent of the Vocational Education Act of 1968, a considerable increase in the number of cooperative work experience programs offered in Oregon secondary schools resulted directly from this federal legislation. Because of this expansion, a need developed for determining the effectiveness of these programs in meeting their stated goals and objectives. Additionally, with the rapid technological and sociological changes taking place in the labor market, it appeared essential to review and "update" cooperative work experience program instructional goals and objectives in order to keep pace with changing demands.

After a thorough review of the needs in the field through contacts with several cooperative work experience administrators, university professors, and others familiar with cooperative work experience programs, the problem for this study was selected.

DESIGN OF THE STUDY

The study design consisted of three major phases.

The first phase was to obtain instructional goals and objectives for cooperative work experience programs as identified by the Oregon State Board of Education. This information is a requirement of the State Department of Education as part of a master plan for Vocational Education. It serves as a guideline for local school programs as well as satisfying federal legislation requirements of the Vocational Education Act of 1963.

Secondly, in order to verify the acceptance of the identified instructional goals and objectives as being an integral part of ongoing cooperative work experience programs in the state of Oregon, Cooperative Work Experience Administrators from eight Oregon high schools were contacted. This was done in order to obtain their feedback as to the actual compatability of these identified instructional goals and objectives to their programs. Refer to "Procedures Used to Identify the Oregon High Schools that Participated in this Study" (pp. 97) for the method of selection.

The final phase was to develop an instrument and administer it to former students of cooperative work experience programs at eight selected Oregon high schools. This selected population was asked to respond to the questionnaire in order to measure the perceptions they have of the identified instructional goals and objectives of cooperative work experience programs, and how these have affected their occupational endeavors.

ENDORSEMENTS NECESSARY FOR THIS STUDY

Because the population of this study was made up of former 1971 senior secondary cooperative work experience students. The cooperation of the selected local high school administration from which the population was drawn was necessary to obtain the home addresses of the selected 1971 cooperative work experience students. Because of the confidentiality of this information, it was very helpful that endorsements of this study were given by the Oregon State Department of Education, before the selected secondary schools would release the needed information.

In order to facilitate the gathering of data, approval of the study was received from Mr. Gerald Leadham, the Oregon State Department of Education Specialist for Cooperative Work Experience Education. Mr. Leadham indicated his support of the research and offered the assistance of his resources where needed.

Because this study used a questionnaire to gather data involving human subjects, approval was also obtained from Dr. Roy A. Young, the Oregon State University Representative of the Department of Health, Education and Welfare.

These endorsements were of inestimable value in securing the needed assistance for gathering data, and in giving the needed status to the research.

REVIEW OF THE LITERATURE

A review of the related literature was undertaken in an effort to determine the extent of previous work in the field. In addition, the literature aided in defining cooperative work experience education, enumerating its values, and building a case for the need for an investigation of the instructional goals and objectives.

The reviewed literature served as a background for the criteria variables which were developed. It was these criteria variables which were reacted upon by the former students of the selected cooperative work experience programs.

This information reported in Chapter II establishing the value of vocational education programs suggests that one of the first steps in developing a planned, purposeful evaluation of cooperative work experience programs is the specification of the educational objectives which such programs are designed to achieve.

An in-depth search of the literature reveals that most of the goals and objectives of cooperative work experience programs have been stated in broad, general terms. Such broad-based statements provide questionable criteria for determining an actual change in student behavior regarding their occupational interest and preparation.

Based on the above observation, it was believed that a significant contribution that could be made in this study would be the specification of the instructional goals and objectives of cooperative work experience programs in behavioral terms capable of measurement. The intent underlying this assumption was that such behavioral descriptions of cooperative work experience goals and objectives could bring them from a level of highly abstract generalization to a level of concrete experience that will help determine exactly what it is that cooperative work experience should accomplish in terms of changes in knowledge, skills and abilities as well as illustrating and defining important subject matter and content areas.

The following operational objectives were used to organize the information for this phase of the study:

1. Definitions of the instructional goals and objectives of cooperative work experience programs for secondary schools in the State of Oregon were obtained.
2. A classification system for the instructional goals and objectives for cooperative work experience programs in the secondary schools in the State of Oregon was developed.
3. Statements of instructional objectives for Oregon secondary cooperative work experience programs were, where necessary, classified and re-defined in measurable terms.

4. The adequacy of these instructional goals and objectives as descriptions of those currently being used in secondary schools in the State of Oregon was determined.

DEFINING THE FIELD OF COOPERATIVE WORK EXPERIENCE

One of the criteria essential for determining instructional goals and objectives of cooperative work experience programs is to have a clear definition of the field of study.

An analysis of the following definition of cooperative work experience provides a basis for determining an "operational definition" which was useful in describing the instructional goals and objectives and in providing a framework for determining instructional outcomes.

Cooperative work experience programs have been defined nationally in Section 175 of P.L. 90-576 as follows:

A program of vocational education for persons who, through a cooperative arrangement between the school and employers, receive instruction, including required academic courses and related vocational instruction, by alternation of study in school with a job in any occupational field, but these two experiences must be planned and supervised by the school and employers so that each contributes to the student's education and to his employability. Work periods and school attendance may be on alternate half-days, full-days, weeks, or other periods of time fulfilling the Cooperative Work-Study (Vocational Education) Program. (Emphasis added)

The interpretation of items underscored above, as found in the Resource Manual 71 for the development of Cooperative Vocational

Education Programs (1970) is as follows:

- a) Cooperative arrangement -- An agreement between the school and an employer, evidenced by a documented training agreement, to provide instruction and work experience in accordance with students' training needs.
- b) Employer -- One who provides on-the-job instruction for the student, who is legally employed part-time or full-time, depending upon the schedule of alternation, and from whom the students receive compensation.
- c) Required academic courses -- Those which are designed for the general student body and are normally required for graduation; such courses are not considered eligible for reimbursement from vocational education funds except as qualified under Part G funding.
- d) Related vocational instruction -- An in-school course specifically designed to develop and improve occupational skills, knowledge, and attitudes, and, to the extent needed, basic education (remedial) and personal social skills; cost of such courses may be reimbursed from vocational education funds. An academic course deemed essential for occupational preparation may be recognized as related vocational instruction if the course is specifically organized to meet the needs of cooperative work experience students.

- e) Alternation of study in school with a job -- The scheduling of employment, as part of the student's class load, in any time sequence that will assure adequate preparation in meeting qualifications for full-time employment; school credit is granted for the employment period (p. 2).

In the above definitions the following four concepts which appear to be either clearly expressed or implied, are relevant for an operational definition of cooperative work experience programs:

1. Cooperative work experience is systematic in that it involves a series of planned, purposeful, educative experiences and does not relate to chance learning, which may occur in various situations where learning is not a primary goal.
2. It involves an active, planned, purposeful pursuit on the part of the learner, which leads toward the achievement of identified goals and objectives.
3. It replaces formal school when such study is central to the primary activity of the student.
4. It has an ethic, which is based on the ideology and philosophical values of educational experiences provided for by actual on-the-job training.

The previously operational definition of the cooperative work experience programs made it possible to delimit the scope of the instructional goals and objectives by providing boundaries, which

indicate whether or not a proposed goal or objective falls within the area of instructional concern. Such a definition also facilitated a more uniform and systematic method of communication among the persons involved in this study.

As an educational program still in its conceptual and formative phase in Oregon secondary schools, cooperative work experience had not yet reached the stage where there was consistency and unanimity of opinion among its local personnel as to the exact nature and scope of the program's goals and objectives. A review of the literature dealing with the national development of cooperative work experience programs reinforced the author's expectation that as these secondary programs in Oregon grow they will acquire a more uniform concept of instructional goals and objectives.

IDENTIFYING INSTRUCTIONAL GOALS AND OBJECTIVES OF OREGON SECONDARY COOPERATIVE WORK EXPERIENCE PROGRAMS

The initial step taken in the first phase of this study -- identifying the Oregon State Department of Education's established instructional goals and objectives for cooperative work experience secondary programs -- was to meet with Mr. Gerald Leadham, Specialist for Cooperative Work Experience Education. He provided copies of identified cooperative work experience goals and objectives. (See Appendix A). Mr. Leadham explained that cooperative work experience education is an integral part of the total vocational program. Therefore, Oregon cooperative work experience programs would also encompass the same goals and objectives for vocational education

defined by the Oregon State Plan for Vocational Education (See Appendix B).

The Review of the Literature also produced several Oregon State Department of Education publications directly related to cooperative work experience education that identified instructional goals and objectives (See Appendices C and D).

Once a total listing of all identifiable cooperative work experience education goals and objectives was compiled, it became necessary to review and combine objectives because many of them had been duplicated in the various publications.

The next step completed in this study by the author was to go through the combined listing and eliminate those goals and objectives that did not directly relate to cooperative work experience education instruction. The program goals and objectives removed were those having to do with the administration and funding of cooperative work experience education. Since it was the purpose of this study to investigate the instructional goals and objectives of cooperative work experience education, it was felt that the goals and objectives not directly related to the actual instruction should be removed in order to maintain a precise study. The procedures used to accomplish this task are more fully explained in the section covering the methods employed to verify the comparability of the identified Instruction Goals and Objectives of Oregon Secondary Cooperative Work Experience Programs (p. 92). Also, there were many duplications of instructional goals and

objectives that had used different phraseology to say the same thing, or had used a great many more words to say what had been previously stated in a simpler manner. Because of this, it became necessary in some cases to paraphrase several of the objectives in order to be able to state them clearly in terms that would make it possible for them to be used as measurable criterion variables. Upon establishing a precise listing of cooperative work experience education instructional goals and objectives, it was found that the identified instructional goals broke down into two separate categories.

The first major identified goal was that of "occupational preparation." Under this aim of cooperative work experience education was listed twelve identified instructional objectives through which this purpose is to be achieved. (See Appendix E) The identified objectives listed under the goal of "occupational preparation" were drawn from the master list of objectives to go in this category because of their direct relationship to this identified goal.

The second major identified goal was that of promoting "self-understanding" on the part of cooperative work experience education students as to their individual personal relationships in the world-of-work. Under this aim of cooperative work experience education were listed six identified instructional objectives through which this purpose is to be achieved. Again, these identified objectives listed under the goal of "self-understanding"

were drawn from the previous list of objectives to go in this category based upon their direct relationship to this identified goal. The completed list of the identified goals and objectives of cooperative work experience education as defined by this study, based upon information obtained from the Oregon State Department of Education, may be found listed in Appendices E and F.

POPULATION AND SAMPLING TECHNIQUES

It was determined by the prerequisites of the study as previously delineated in Chapter I, "Limitations of the Study." that the population from which the sample would be selected should consist of the 1971 cooperative work experience program seniors of secondary cooperative work experience programs, which had been approved by the Oregon State Department of Education, Department of Career Education. A list of these programs was obtained from Gerald Leadham, Oregon State Department of Education, Specialist for Cooperative Work Experience Education. Because Mr. Leadham was ultimately responsible for approval of cooperative work experience programs in the state, it was believed that a list from his office would be authoritative and complete.

With the list of state-approved cooperative work experience programs comprising a population of forty-one secondary school districts, it was decided to obtain a state-wide representative sample by which to conduct the survey. Because the entire population consisted of forty-eight high schools with an enrollment of approximately 1700 students in cooperative work experience programs

during the 1970-71 school year, it was concluded that a representative population of these schools, if selected in an unbiased manner, would provide a valid sample.

In order to choose a population to be used in this investigation, it was necessary to first identify the names and number of seniors who had been in these cooperative work experience programs since they were the ones to be used in the gathering of data and not the 1700 total enrollment. Rather than going to each school and asking them to research their files for this information, it was learned from Dr. David Fretwell, Oregon State Department of Education Research Specialist, that these names were available through the use of the Verify Vocational Follow-up System Files (Palo Alto Educational Systems, Inc., 1971). This vocational follow-up system was used by the Oregon State Department of Education in 1971 to gain information on all vocational students enrolled in Oregon public schools at that time. Through the use of the Verify files, it was possible to identify all graduating seniors enrolled in cooperative work experience programs, their sex, and instructor's name. The total number of seniors according to the Verify files was 647. It was also learned from Dr. Fretwell that because a few schools had failed to report their cooperative work experience program students, this number was not representative of the total number of program seniors. Another problem encountered with the Verify files was that the records containing the home addresses of these students had been inadvertently disposed of.

It was decided that in order to obtain a statistically valid sample, a primary population of 200 plus students should be surveyed. In order to satisfy this criteria, the schools selected to provide this population had to have a combined total of over 200 cooperative work experience seniors.

PROCEDURES USED TO IDENTIFY THE OREGON HIGH SCHOOLS
THAT PARTICIPATED IN THIS STUDY

The criteria used in the selection of Oregon secondary schools from which the population to be used was drawn was a concentration effort to achieve a total state-wide model. The schools selected represented a statewide profile of population distribution and labor market conditions.

A tentative selection was made based upon the two above-mentioned criteria. The selected school administrators were contacted by telephone, at which time they were given a brief description of the study and asked if it would be possible to set up an appointment to more thoroughly discuss the possibility of their cooperation in getting the addresses of the former cooperative work experience program students. Limitations on the number of schools to be included in the study and the manner of utilization of school records were imposed by the district administration because of policies relating to releasing student names, addresses, and transcript information.

Eight schools were finally selected and agreed to assist by providing the addresses of the 1971 cooperative work experience program students as listed in Appendix G. Arrangements were made to visit seven school principals and administrators in order to obtain the addresses of their identified cooperative work experience program students. A letter was sent to one high school requesting the needed information, but because, during a telephone conversation, the principal had agreed to participate in the study and furnish the information, a visit was not necessary. (See Appendix H)

The breakdown of their individual state representation is as follows:

The schools were selected from the City of Portland proper because of its population concentration (over 383,000 people live and work there). Because Portland is the center for business and industry in Oregon, it has the highest concentration of employed workers, making it the largest single labor market. Portland also has the greatest number of unemployed workers in the 16 to 25-year-old age group.

The criteria used to decide which Portland high schools were to be selected was:

- (1) The Portland high school with the highest enrollment of seniors in its cooperative work experience program during the 1970-71 school year.
- (2) The Portland high school with the smallest enrollment

of seniors in its cooperative work experience program during the 1970-71 school year.

- (3) The Portland high school whose enrollment comes closest to matching the mean number of seniors in all the Portland cooperative work experience programs during the 1970-71 school year.

Two schools were selected from large suburban areas adjacent to Portland because they help make up the metropolitan population of nearly one million. These two schools are located in primarily "bedroom" communities, which supply additional manpower for the Portland metropolitan labor market.

Two schools were selected from rural farming communities because of their representation of Oregon's agri-business industries. These two rural schools were selected from the Willamette Valley area because this is where the majority of Oregon's population lives and works.

One school was selected from a coastal community because it represented both the logging and fishing industries. This community is average sized compared to the other population centers located on the Oregon coastline.

No schools were selected from eastern Oregon because:

- (1) There are very few secondary cooperative work experience programs located in that area, and the ones that do exist are generally quite small.
- (2) Those schools were unwilling to participate in this study.

The list of these eight selected schools may be found in Appendix H. These eight Oregon high schools had ongoing cooperative work experience programs in the 1970-71 school year with a combined total of 206 seniors enrolled. This number of selected students represented approximately 35 percent of the total number of cooperative work experience seniors enrolled in the programs during the 1970-71 school year in Oregon secondary schools. The cooperative work experience programs selected for this study all met the criteria as set forth in the delimitations of the study. (See Chapter I). Letters of appreciation were mailed to each participating school administrator as well as a final copy of this study.

Table 2 on the following pages (pp. 101-102), gives a breakdown of each school selected, listing, according to sex and race, the students comprising the sample population in this study.

TABLE 2. Selected 1971 Cooperative Work Experience Program Student Population Surveyed by This Study.

	Anglo	Black	American Indian	Mexican American	Oriental	Did Not Specify	Other Than Already Specified	Total
Group I								
Washington H.S.								
Portland								
Males	4			1		9		14
Females								0
Group II								
Beaverton H.S.								
Beaverton								
Males	11							11
Females	27							27
Group III								
Tillamook H.S.								
Tillamook								
Males	10		1					11
Females	3		1		1			5
Group IV								
Tigard H.S.								
Tigard								
Males	15						1	16
Females	13		1					14
Group V								
Silverton H.S.								
Silverton								
Males	3							3
Females	8							8

TABLE 2 (Continued)

	Anglo	Black	American Indian	Mexican American	Oriental	Did Not Specify	Other Than Already Specified	Total
Group VI								
McMinnville H.S.								
McMinnville								
Males	8							8
Females	10			1				11
Group VII								
Grant H.S.								
Portland								
Males	2	1			1			4
Females	16	6					1	23
Group VIII								
Cleveland H.S.								
Portland								
Males	11					2		13
Females	35					3		38
Totals								
Males	64	1	1	1	1	11	1	80
Females	112	6	2	1	1	3	1	126
Complete TOTAL	176	7	3	2	2	14	2	206

VERIFYING THE COMPATABILITY OF THE IDENTIFIED INSTRUCTIONAL
GOALS AND OBJECTIVES TO THOSE OF THE SELECTED PROGRAMS

As defined in "Statement of the Problem" (Chapter 1), the second phase of this investigation was to compare the identified instructional goals and objectives of cooperative work experience programs with those of the selected schools that agreed to participate in this study. This was done in order to establish a consistency of direction and compatability between the Oregon State Department of Education's identified instructional goals and objectives for cooperative work experience education and those of the selected secondary school participants. Through this process, it was possible to verify that the students involved in this study had been in a cooperative work experience program whereby the instructional goals and objectives had been the same or very similar to those used by this investigator.

Each Cooperative Work Experience Program Coordinator at the high schools selected for this study was contacted either in person, by telephone, or by mail. Where ever possible a personal interview was arranged between the investigator and the selected Cooperative Work Experience Coordinators. When this could not be done, a letter was mailed explaining the study and asking for their assistance. A copy of the letter may be found in Appendix I. Because of conflicts in schedules, both on the part of the investigator and selected Cooperative Work Experience Coordinators, only three were interviewed in person. Contact was made either by telephone and/or mail with the other five.

Each selected Cooperative Work Experience Coordinator was asked to read and review the identified list of Cooperative Work Experience Instructional Goals and Objectives (Appendix E and F), and compare these to their existing program for compatability. All of the Cooperative Work Experience Coordinators were asked to respond to any of the identified instructional goals and objectives that they felt did not apply to their individual program, or suggest changes wherever they felt the need existed. They were also asked to include any cooperative work experience instructional goals and objectives that they believed had been left out (see Appendix J).

A copy of the cooperative work experience program instructional goals and objectives which had been identified by the individual schools was requested. Three of the eight schools responded with their individual identified cooperative work experience program goals and objectives. It became apparent that the other schools did not have a formal list of identified cooperative work experience goals and objectives. Of the three copies attained, two were almost exact replicas of those goals and objectives identified by the Oregon State Department of Education. The third was a paraphrased version of the goals and objectives of vocational education as defined by the Oregon State Plan for Vocational Education (see Appendix K).

The result of this phase of the study was the acceptance of the identified instructional goals and objectives of cooperative work experience programs by the selected schools. Minor suggestions

on the part of a few of the Cooperative Work Experience Coordinators surveyed were, wherever possible, included in the final listing, but generally there were no significant differences.

For a complete list of those persons involved in the review and survey of the identified instructional goals and objectives of Oregon secondary cooperative work experience education, see Appendix L.

Based upon the foregoing, the conclusion was drawn that the graduates of these selected programs had received educational experience directly related to the instructional goals and objectives of cooperative work experience education.

Footnote: These suggestions were primarily concerned with the use of words in describing the objectives. In one case, another objective was added, but because of no related support for this objective, it was not included.

GATHERING THE DATA

The third phase and major objective of this study was to obtain descriptive data with which factual information could be accumulated in order to assess effectiveness of the identified instructional goals and objectives. In order to determine the effectiveness cooperative work experience programs in selected Oregon secondary schools had in meeting their identified instructional goals and objectives, it was necessary to obtain the opinions of former students as to the results these educational experiences had upon their individual occupational endeavors. A questionnaire was constructed and mailed to the 206 cooperative work experience program 1971 high school seniors of the eight selected schools. To make certain that enough replies were received to insure a reliable sampling, follow-up techniques were employed. The follow-up techniques employed are fully covered in "Mailing Questionnaire and Follow-Up" (p. 112).

As far as this investigator was able to determine through The Review of the Related Literature, there has never before been a study reported that relates exactly to this particular problem. Due to this situation, it became necessary to develop a questionnaire to meet the objectives of this study.

Demographic data in this study was obtained in order to make comparisons and identify sorting variables (example: male and female, etc.). The first part of this questionnaire was developed and reported as Part I (see Appendix M).

Part II of the questionnaire (see Appendix N) was developed to evaluate the identified instructional goals and objectives of the selected cooperative work experience programs. These identified instructional goals and objectives became the variates for the statistical treatment to be used. These variates are the identified instructional goals and objectives shared by the selected group of secondary cooperative work experience programs participating in this study. It is these identified objectives that are the variates to be tested in order to accept or reject the null hypothesis of this study.

The former students' reponse to the questionnaire were the criterion variables. It is these criterion variables that are used to supply the necessary data to evaluate the variates.

THE QUESTIONNAIRE

To ascertain the effectiveness of the identified instructional goals and objectives of selected Oregon secondary cooperative work experience programs, as well as to provide answers to other related questions, a questionnaire was devised as a means of obtaining the required data. The purpose of the questionnaire was to obtain comprehensive information indicating the degree to which the cooperative work experience program instruction had met the identified goals and objectives. Thus, the questionnaire used in this study was a fundamental device for evaluating instructional goals and objectives of selected Oregon secondary cooperative work experience programs.

As far as this investigator was able to determine through The Review of the Related Literature, there has never before been a study reported that relates exactly to this particular problem. Due to this situation, it became necessary to develop a questionnaire to meet the objectives of this study.

Demographic data in this study was obtained in order to make comparisons and identify sorting variables (example: male and female, etc.). The first part of this questionnaire was developed and reported as Part I (see Appendix M).

Part II of the questionnaire (see Appendix N) was developed to evaluate the identified instructional goals and objectives of the selected cooperative work experience programs. These identified instructional goals and objectives became the variates for the statistical treatment to be used. These variates are the identified instructional goals and objectives shared by the selected group of secondary cooperative work experience programs participating in this study. It is these identified objectives that are the variates to be tested in order to accept or reject the null hypothesis of this study.

The former students' response to the questionnaire were the criterion variables. It is these criterion variables that are used to supply the necessary data to evaluate the variates.

PROCEDURES USED TO TEST AND REFINE THE QUESTIONNAIRE

The questionnaire developed for this study was checked for its adequacy in identifying the necessary data, along with the instruments, clarity, the time to administer it, and the consistency with which it elicited responses. The specific procedures which were used are as follows:

- In order to construct a questionnaire which would adequately measure the identified variables, a draft of the questionnaire was submitted to a jury of experts for their evaluation, responses, and suggested changes. The members of this formal jury were professional educators familiar with the instructional goals and objectives of cooperative work experience. A complete list of the jury of experts may be found in Appendix O.
- To further refine the questions, fifteen students in Oregon State University Industrial Education Department were asked to answer the questionnaire and to point out where questions were not clear to them. A few questions were changed as a result of this procedure and a few alternative responses were included.
- To test the readability and length of time required to answer the questionnaire, the instrument was given to a class of 31 local industrial arts high

school students. As a result of this test, it was apparent that the students had no problems in interpreting the questions; the instrument was completed by the students in an average time of 15 minutes.

- The returns from an initial mailing of eleven questionnaires were analyzed to determine whether or not the questions were being answered correctly. From this test of the instrument, no changes appeared necessary.
- The questionnaire was submitted to Dr. David Niess, Oregon State University, Systems Analyst, to prepare it for coding and computer programming.

THE STATISTICAL DESIGN

The purpose of this study was to determine if there were statistically significant differences between the identified instructional goals and objectives of selected Oregon secondary cooperative work experience programs and the accomplished results based upon former students' perceptions.

The general design of this study included the following:

1. The population utilized by this study was made up of 206 1971 senior cooperative work experience students from the eight selected high schools. This population sample was used to provide data by completing and returning questionnaires which were mailed directly to them.

2. In Part I of the questionnaire the respondents were asked to react to each of the 25 demographic statements, in order to provide data for sorting and comparison evaluation. The responses were recorded by a multiple choice selection and fill in, i.e., age, number of jobs, etc.
3. In Part II of the questionnaire, the respondents were asked to react to each of the 54 evaluation statements by recording a level of agreement or disagreement on a five-point Likert-type scale. Responses ranging from 5.0 (strongly agree) to 1.0 (strongly disagree) were recorded.
4. There was an interest in learning if differences existed among the mean scores of the groups participating in the study. The null-hypothesis tested in this study was: there is no significant difference between the identified instructional goals and objectives of the cooperative work experience programs in selected Oregon secondary schools and their actual outcome as perceived by the former students. The one-way classification analysis of variance measured the respondent's means score differences and was used to test the hypothesis. The test statistic used to analyze contrasts among the mean scores for each statement was the statistic

with the .05 level of significance being used to determine where differences existed among the groups. The analysis of variance design used in testing the hypothesis may be found in Appendix P.

MAILING QUESTIONNAIRE AND FOLLOW-UP

The final revised form of the questionnaire was printed and mailed to the participants in this study. A cover letter accompanying each questionnaire explained the purpose of the study and asked for their assistance. The participants were guaranteed that their response would be held in strictest confidence and that they would remain anonymous (see Appendix Q for a copy of the cover letter). Each questionnaire was accompanied by a full set of instructions as well as a self-addressed, stamped envelope. Each questionnaire had been previously coded in order to determine which selected students responded.

At the end of the first week a reminder was mailed to those individuals who had not sent the questionnaire back asking them to do so (see Appendix R). At the end of the second week another copy of the questionnaire was mailed to those individuals who had not responded at that time. Another cover letter was included explaining the need for their assistance in responding as soon as possible (see Appendix S). Each envelope was stamped with a "please forward" message. Again, a self-addressed, stamped return

envelope was included. At the end of the third week, telephone calls were made to all those former students who still had not responded to the mailings. Those contacted were again told of the need for their help in the study and, in particular cases where necessary, a third copy of the questionnaire was mailed.

The final step in the treatment of the questionnaire was the transfer of data to data processing cards for computer analysis. The method for coding cards is outlined in Appendix T.

ANALYSIS OF DATA AND SUMMARY

After collecting, categorizing and coding the data, they were analyzed in the following manner:

1. Data from the returned questionnaires were coded and key punched on IBM cards for electronic computer analysis, using the CEC 3300 Computer at the Oregon State University Computer Center. Key punching was verified in the process.
2. Respondents were asked to react to each of 25 statements recording demographic data.
3. Respondents were also asked to react to each of 54 statements by recording a level of agreement or disagreement on a five-point Likert type scale. Responses ranged from strongly agree to strongly disagree and point values ranging from 5.0 (agree strongly) to 1.0 (disagree

strongly) were recorded for each response.

4. There was an interest in learning if differences existed among the mean scores of the males and females participating in the study. The hypothesis tested in this study was that there is no significant differences among the opinions of former secondary cooperative work experience students, whether male or female, concerning the instructional goals and objectives of the program. The one-way classification Analysis of Variance measured the respondents' mean score differences and was used to test the hypothesis. The test statistic used to analyze contrasts among the mean scores for each statement was the F statistic with the .05 level of significance being used to determine where differences existed among the three groups. The Analysis of Variance design used in testing the hypothesis may be found in Appendix P.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The purpose of this chapter is to present the information obtained from the sample and to analyze the data by testing the hypothesis cited in Chapter I. Chapter III contained the detailed procedure and statistical techniques used to conduct the study. The sections presented in this chapter include: Demographic Data of the Sample Findings related to the Null-Hypothesis and the Findings Related to the Perceived Criterion Variables.

DEMOGRAPHIC DATA OF THE SAMPLE

The data for this study was provided by 102 former 1971 high school seniors, who had been enrolled in a cooperative work experience program. This population, drawn from eight selected Oregon public high schools, was composed of 36 males and 66 females, who had returned the survey instrument. See Table 3 (p. 116) for the breakdown of respondents for each selected school by sex and racial grouping.

Data obtained indicated seventy-one and six-tenths percent (71.6%) of the former 1971 Secondary Cooperative Work Experience Program students surveyed were twenty years old, seventeen and six-tenths percent (17.6%) were eighteen years old, and ten and eight-tenths percent (10.8%) were twenty-one years old. This data is entirely within the range of age groups of former students that

Table 3. ACTUAL POPULATION OF 1971 SECONDARY COOPERATIVE WORK EXPERIENCE PROGRAM WHO REPLIED TO SURVEY INSTRUMENT

	Anglo	Black	American Indian	Mexican American	Oriental	Did not Specify	Other than Already Specified	Total
Group I								
Washington H.S.								
Portland								
Males	2					4		6
Females								0
Group II								
Beaverton H.S.								
Beaverton								
Males	7							7
Females	16							16
Group III								
Tillamook H.S.								
Tillamook								
Males	1							1
Females			1		1			2
Group IV								
Tigard H.S.								
Tigard								
Males	6						1	7
Females	7							7
Group V								
Silverton H.S.								
Silverton								
Males	2							2
Females	7							7

Table 3. (Continued)

	Anglo	Black	American Indian	Mexican American	Oriental	Did not Specify	Other than Already Specified	Total
Group VI								
McMinnville H.S.								
McMinnville								
Males								
Females								
Group VII								
Grant H.S.								
Portland								
Males	8					1	1	10
Females	14							14
Group VIII								
Cleveland H.S.								
Portland								
Males	1							1
Females	8	4				1		13
Totals								
Males	29					5	2	36
Females	59	4	1		1	1		66
Completed Totals	88	4	1	0	1	6	2	102

were high school seniors during the 1970-71 school year. Male respondents averaged approximately one-half year older than female respondents. See Table 4 (p. 119) for details.

Of the former 1971 Secondary Cooperative Work Experience Program senior students who responded to the survey, 66.7 percent of the males and 69.7 percent of the females were currently employed full time. Of this same population surveyed, 5.6 percent of the males and 5.0 percent of the females were employed part time. Eleven and one-tenth (11.1) percent of the male respondents and 3.0 percent of the female respondents listed themselves as unemployed and looking for work. The combined total of respondents, who listed themselves as currently unemployed (July, 1973) and looking for work, was 5.9 percent. All of the unemployed male respondents said they were looking for work, while one female claimed she was unemployed and was not trying to find a job. One male respondent was unemployed at the time of the survey and was looking for summer work only because he was a full-time student during the school year. Thus four males out of the population of 36 respondents were unemployed at the time of the survey. Eight of the female respondents (12.1 percent) listed themselves as full-time housewives. One (2.8 percent) of the male respondents and six (9.1 percent) of the females said they were full-time students at the time of this survey. Table 5 (p. 120) summarizes the current employment status of respondents.

Twenty-six separate occupational titles were represented by the 36 males responding to the survey instrument. The single

Table 4. CURRENT AGE OF 1971 COOPERATIVE WORK EXPERIENCE PROGRAM STUDENTS SURVEYED.

	19 Years Old		20 Years Old		21 Years Old		Mean Age
	Number	Percentage	Number	Percentage	Number	Percentage	
Males	1	2.8	28	77.8	7	19.4	20.16
Females	17	25.8	45	68.2	4	6.1	19.80
Total	18	17.6	73	71.6	11	10.8	19.93

Table 5. CURRENT EMPLOYMENT STATUS OF 1971 COOPERATIVE WORK EXPERIENCE PROGRAM STUDENTS SURVEYED.

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Employed Full-time	24	66.7	46	69.7	70	68.6
Employed Part-time	2	5.6	3	4.5	5	4.9
Unemployed:						
1. Looking for work	4	11.1	2	3.0	6	5.9
2. Not looking	-	-	1	1.5	1	1.0
Self-employed	-	-	-	-	-	-
Armed services	5	13.9	-	-	5	4.9
Student	1	2.8	6	9.1	7	6.9
Housewife	-	-	8	12.1	8	7.8
Total	36	100	66	100	102	100

largest grouping of occupational positions currently held by the male population at the time of the survey was the Armed Forces. One male was in the U.S. Air Force at the time of the survey, while two were in the United States Army and two in the United States Navy. Of the total population of 36 males responding to the survey, 5 were currently employed by the United States Military Services, representing 13.9 percent of the male population. The only other occupational title to indicate more than one male response was that of lumber mill worker, which two of the males returning the instrument were employed in. Two other males described themselves as being full-time students, but one of them was out of school for the summer at the time he responded to the survey, and was looking for employment as described earlier. Fifteen (42 percent) of the males responding to the survey were employed in skilled labor occupational areas corresponding to fourteen occupational descriptions. Two respondents were employed in technician-type positions. Four (11 percent) of the male respondents were employed in unskilled occupational areas. See Appendix U for details.

Excluding those who listed themselves as being unemployed, twenty-five separate occupational descriptions were submitted by the female respondents. The greatest number of occupational positions represented by the female respondent population was in the field of nursing and/or nurse's aides. This single category had eight (12.1 percent) respondents. The next largest group was

employed as secretaries, with a total of seven (10.6 percent) respondents. Nineteen female respondents classified themselves as being employed in five categories of clerical positions, such as file clerk, clerk typist, and bank clerk. The next two largest occupational areas represented were students and housewives with six respondents in each category. Three respondents were employed in assembly work. Interestingly, one female responded that she was employed in an occupation previously held predominantly by males -- telephone installer. Out of the sixty-six female respondents, fifty-one were working in office-occupational areas. No females responding listed themselves as being in the Armed Forces. See Appendix U and V for details.

Of the one hundred two (102) 1971 Secondary Cooperative Work Experience Program students surveyed, 46.1 percent were employed full time in less than one month after leaving school. Out of this total of forty-seven former cooperative work experience students, who were employed in less than one month, five females had already been employed at the same job before leaving school. By the end of the first month after leaving school sixty-seven of the former cooperative work experience students were employed, which represents 65.7 percent of the total population responding to the survey. By the end of five months, 91.6 percent of the males and 86.4 percent of the females respondents were employed. One male and two female respondents had never held a paid employment position and had not been looking for one. All of the other former cooperative work experience students surveyed, who have attempted to get a job, had

found paid employment positions since leaving school. See Table 6 (p. 124) for more complete details.

Five of the male respondents (13.9 percent) were still employed at the original job they had after leaving school. Whereas, twenty-seven of the female respondents (40.9 percent) have remained on their original job. Thirty females, or 45.5 percent, reported that they have had only one job since leaving school. Three of these female respondents are no longer in the labor pool for one reason or another. Thirty-three and three-tenths (33.3) percent of both the male and female former secondary 1971 cooperative work experience program students surveyed have had two different jobs. Eighteen male respondents (50 percent) and twelve females (18.2 percent) have had three to five different jobs since leaving school. Again, it must be mentioned that one of the males and two of the females responding to the survey have never failed a wage-receiving position. Table 7 (pp. 125-126) gives a complete breakdown of the total response population employment history as well as reasons for changing job. Change of occupation was the major reason given by the male respondents who had left their first job. A total of nine males or 25 percent listed change of occupation for the reason they are no longer employed at their first jobs. Only six females or 9.1 percent of this group left their first job because they wanted to change their occupation. A majority of fourteen females (21.2 percent) declared that they left their first job for more pay. The second largest group of males (8 responses,

Table 6. LENGTH OF TIME REPORTED BY THE 1971 COOPERATIVE WORK EXPERIENCE PROGRAM SECONDARY STUDENTS TO BE HIRED ON THEIR FIRST JOB (TO THE NEAREST MONTH)

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Less than one month	13	36.1	34	51.5	47	46.1
1 Months	12	33.3	8	12.1	20	19.6
2 Months	3	8.3	5	7.6	8	7.8
3 Months	1	2.8	5	7.6	6	5.9
4 Months	3	8.3	4	6.1	7	6.9
5 Months	1	2.8	1	1.5	2	2.0
7 Months	-	-	1	1.5	1	1.0
8 Months	1	-	2	3.0	2	2.0
12 Months	1	2.8	-	-	1	1.0
13 Months	-	-	1	1.5	1	1.0
18 Months	-	-	1	1.5	1	1.0
22 Months	1	2.8	-	-	1	1.0
24 Months	-	-	1	1.5	1	1.0
Never Employed	1	2.8	2	3.0	3	2.9

Table 7. EMPLOYMENT HISTORY

NUMBER OF DIFFERENT JOBS HELD BY SURVEYED 1971 COOPERATIVE WORK EXPERIENCE PROGRAM STUDENTS

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
None	1	2.8	2	3.0	3	2.9
1	5	13.9	30	45.5	35	34.3
2	12	22.2	22	33.3	34	33.3
3	13	36.1	10	15.2	23	22.5
4	2	5.6	1	1.5	3	2.9
5	3	8.3	1	1.5	4	3.9
Total	36	100	66	100	102	100
PRESENTLY EMPLOYED ON THE SAME JOB SINCE LEAVING HIGH SCHOOL						
Yes	5	13.9	27	40.9	32	31.4
No	31	86.1	39	59.1	70	68.6
Total	36	100	66	100	102	100

Table 7. (Continued)

REASONS GIVEN BY 1971 COOPERATIVE WORK EXPERIENCE PROGRAM STUDENTS SURVEYED
FOR LEAVING THEIR FIRST JOBS.

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
More pay	8	2.2	14	21.2	22	21.1
Better opportunities elsewhere	6	16.7	8	12.1	14	13.7
Poor working conditions	1	2.8	0	0	1	1.0
Change of occupa- tion	9	25.0	6	9.1	15	14.7
Laid off	4	11.1	5	7.6	9	8.8
Other	3	8.3	12	18.2	15	14.7
No response	5	13.9	21	31.8	26	25.5
Total	36	100	66	100	102	100

22.2 percent of the population) indicated this reason for changing employment. A combined total population of 21.1 percent indicated that they left their first place of employment for more pay elsewhere. Better opportunities elsewhere counted for six (16.7 percent) of the males and eight (12.1 percent) of the females. Only four (11.1 percent) of the males and five (7.6 percent) of the females responded that the reason they had left their first job was because they had been "laid off." Poor working conditions was the reason for leaving the first job in only one case among the returned questionnaires. This was the case with one male, and no females indicated this as being the reason for leaving their first employment. An open-ended question asking for any other reason than those previously described resulted in a response in three (8.3 percent) of the males and twelve (18.2 percent) of the females. Even though there was not a required written response to this reason, several of the returned questionnaires provided written explanations to the reply of "other." There were predominantly four reasons of "returning to school" or "got married," "having children," and "going into the military."

As shown in Table 8 (p. 128), the length of time (in months) the respondents have been employed at their current job varies from thirty-six months to less than one month. Six of the female respondents are still employed at the same job they had before leaving school. Eleven point one percent (11.1%) male and twenty-seven point six percent (27.6%) of the total population surveyed

Table 8. THE LENGTH OF TIME (MONTHS) THE 1971 COOPERATIVE WORK EXPERIENCE PROGRAM STUDENTS SURVEYED HAVE BEEN EMPLOYED AT THEIR PRESENT JOB

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Less than one month	4	11.1	8	12.1	12	11.8
1 month	2	5.6	5	7.6	7	6.9
2 months	3	8.3	-	-	3	2.9
3 months	5	13.9	1	1.5	6	5.9
4 months	2	5.6	3	4.5	5	4.9
5 months	-	-	2	3.0	2	2.0
6 months	2	5.6	3	4.5	5	4.9
7 months	-	-	2	3.0	2	2.0
8 months	3	8.3	2	3.0	5	4.9
9 months	-	-	1	1.5	1	1.0
10 months	2	5.6	3	4.5	5	4.9
11 months	1	2.8	2	3.0	3	2.9
12 months	1	2.8	5	7.6	6	5.9
13 months	-	-	-	-	-	-
14 months	-	-	1	1.5	1	1.0
15 months	1	2.8	-	-	1	1.0
16 months	2	5.6	1	1	2	2.0
17 months	-	-	-	-	-	-
18 months	2	5.6	2	3.0	4	3.9
19 months	1	2.8	1	1.5	2	2.0
20 months	1	2.8	7	10.6	8	7.8
21 months	-	-	-	-	-	-
22 months	-	-	-	-	-	-
23 months	-	-	1	1.5	1	1.0
24 months	3	8.3	11	16.7	14	13.7
25 months	1	2.8	1	1.5	2	2.0
30 months	-	-	1	1.5	1	1.0
32 months	-	-	1	1.5	1	1.0
36 months	-	-	3	4.5	3	2.9
Total	36	100	66	100	102	100

have been employed on the same job since leaving school, June, 1971. The majority of population surveyed have been employed at their present job for ten months or longer. Fifteen of the male respondents (41.7 percent) and thrity-nine of the female respondents have held their present jobs for ten months or longer for a combined total of fifty-three percent (53%). At the time of this sruvey, four of the male respondents (11.1 percent) and eight of the female respondents (12.1 percent) reported that they had been employed at their current job for less than one month. This was eleven point eight percent (11.8%) of the total population of respondents.

As shown by Table 8 (p. 130), 36.1 percent of the males and 51.1 percent of the females, who replied to the survey were presently married. None of the respondents classified themselves ad divorced or widowed. Fifty-three and nine tenths percent (53.9%) of the total population of one hundred two (102) former secondary 1971 cooperative work experience program student respondents were single as of July, 1973.

At the time of the survey (July, 1973), two of the male respondents and six of the females described themselves as full-time four-year-college students. One male and two females were enrolled full time at a community college whereas two males and seven females were attending community college part time. Of important notice was the seven males (19.4 percent) and three female (5 percent) respondents who were currently involved in

Table 9. MARITAL STATUS OF 1971 COOPERATIVE WORK EXPERIENCE PROGRAM STUDENTS SURVEYED

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Married	13	36.1	34	51.5	47	46.1
Single	23	63.9	32	48.5	55	53.9
Divorced	--	--	--	--	--	--
Widowed	--	--	--	--	--	--
Total	36	100	66	100	102	100

a supervised on-the-job training program. One female respondent reported that she was currently involved in a formal trade-training program.

Table 10 (p. 132) summarizes the education program the respondents were enrolled in at the time of this survey.

Table 11 (pp. 133-134) lists the past educational programs the respondents had been involved in since leaving high school. Six males (16.7 percent) and six females (9.1 percent) have at one time or another been enrolled as full-time students in a community college. This represents eleven point eight percent (11.8%) of the total responding population. Another six males and eight females have attended a community college as part-time students. This population represented thirteen point seven (13.7%) of all respondents. One male and four female respondents have attended a four-year college full time, but are no longer doing so. This was seven point eight (7.8%) percent of all respondents. One male (2.8 percent) and one female (1.5 percent) reported that they had attended a trade training school after leaving the high school program. This represented eleven point seven (11.7%) percent of the combined respondent population. Two males and nine females have been involved in a formal on-the-job training program for a combined total of ten point eight percent (10.8%). Thirty-seven (36.3 percent) of all respondents reported to have completed some form of post-secondary educational program.

Table 10. CURRENT POST SECONDARY EDUCATION PROGRAMS ENROLLED IN BY 1971 COOPERATIVE WORK EXPERIENCE STUDENTS SURVEYED

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Community College						
Full-part	1	2.8	2	3.0	3	2.9
Part-time	2	5.6	7	10.6	9	8.8
Four-year College						
Full-time	2	5.6	6	9.1	8	7.8
Part-time	-	-	-	-	-	-
Trade Training School						
Full-time	-	-	1	1.5	1	1.0
Part-time	-	-	-	-	-	-
On-the-Job Training	7	19.4	3	4.5	10	9.8
No Response	24	66.7	47	71.2	71	69.6
Total	36	100	66	100	102	100

Table 11. POST SECONDARY EDUCATIONAL EXPERIENCES OF SURVEY RESPONSES

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Community College						
Full-time	6	16.7	6	9.1	12	11.8
Part-time	6	16.7	8	12.1	14	13.7
Four-year College						
Full-time	1	2.8	4	6.1	5	4.9
Part-time	1	2.8	1	1.5	2	2.0
Trade Training School						
Full-time	2	5.6	6	9.1	8	7.8
Part-time	3	8.3	1	1.5	4	3.9
On-the-job Training	2	5.6	9	13.6	11	10.8
No Response	15	41.7	31	47.0	46	45.1
Total	36	100	66	100	102	100

Table 11. (Continued)

Have Completed a Post-Secondary Educational Program

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Yes	18	50.0	19	28.8	38	36.3
No	18	50.0	47	71.2	65	73.7
Total	36	100	66	100	102	100

Plan to Continue with Some Form of Post-Secondary Education

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Yes	28	77.8	34	51.5	62	60.8
No	8	22.2	32	48.5	40	39.2
Total	36	100	66	100	102	100

The male population had the largest percentage of responses to this inquiry, with eighteen or 50 percent reporting that they had completed a post-secondary educational program. The female response was nineteen or 28.8 percent. A large percentage of the respondents stated that they planned to continue with some form of post-secondary education in the future. The combined total holding this view was sixty-two (60.8 percent). Again, the male population showed the greatest interest in post-secondary education, with twenty-eight or 77.8 percent reporting future educational plans. In this case, over half of the females said they were planning to continue their education with thirty-four or 51.5 percent giving a positive response.

Of the thirty-six male respondents, four (11.1 percent) had been hired on their first jobs at a starting wage of less than \$1.35 an hour. A majority of forty female respondents (60.6 percent) began their first jobs at a wage of between \$1.35 to \$2.00 an hour. Thirteen males (36.1 percent) began their first job at this wage level. A majority of sixteen male respondents (44.4 percent) began their first job at a wage of between \$2.00 to \$3.00 an hour. Only 31.8 percent or twenty-one of the female respondents began their first job at this wage level. Two males (5.6 percent) and one female respondent (1.5 percent) began their first job at a wage level of \$3.00 to \$4.00 an hour for a combined population total of 34.9 percent. No respondent began his first job above \$4.00 an hour wage level. For complete details, see Table 12 (p. 136).

Table 12. FIRST JOB - BEGINNING WAGES RECEIVED BY THE 1971 COOPERATIVE WORK EXPERIENCE PROGRAM STUDENTS FOR A 40-HOUR WORK WEEK.

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Less than \$1.35/hour	4	11.1	-	-	4	3.9
\$1.35 to \$2.00/hour	13	36.1	40	60.6	53	52
\$2.00 to \$3.00/hour	16	44.4	21	31.8	37	36.3
\$3.00 to \$4.00/hour	2	5.6	1	1.5	3	2.9
More than \$4.00/hour	-	-	-	-	-	-
No Response	1	2.8	4	6.1	5	4.9
Total	36	100	66	100	102	100

In response to a question concerning the group's current wage level, no respondents stated that they received a wage of less than \$1.35 to \$2.00 an hour for the combined population total of 8.8 percent of the respondents. A majority of seventeen males (47.2 percent) and forty-eight females (72.7 percent) were currently working at a wage level of \$2.00 to \$3.00 an hour. This population represented 53.7 percent of all questionnaires returned. The second largest grouping of fifteen male respondents (4.17 percent) were currently employed at a \$3.00 to \$4.00 an hour wage level. Only six females or 9.1 percent were receiving this same wage. One male and one female respondent were making more than \$4.00 an hour at the time of this survey. The complete data for this profile may be found on Table 13 (p. 138).

In reply to a question concerning the method used in obtaining their first jobs, a majority of 22.5 percent of all respondents claimed that it was through their school placement office. But when the figure is broken down into male and female grouping, three of the males (8.3 percent) actually relied upon this service, whereas twenty of the females (30 percent) used these facilities. The methods used by male respondents in obtaining their first job after leaving school was split into three categories. Seven male respondents got their first job through their parents. Another seven got their first job through the State Employment Office. The third group of seven male respondents got their first job through personal application. Only two female respondents (3 percent) got their first job through their parents. This same number

Table 13. CURRENT WAGE RECEIVED BY THE 1971 COOPERATIVE WORK EXPERIENCE PROGRAM STUDENTS SURVEYED FOR A 40-HOUR WORK WEEK.

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Less than \$1.35/hour	-	-	-	-	-	-
\$1.35 to \$2.00/hour	2	5.8	7	10.6	9	8.8
\$2.00 to \$3.00/hour	17	47.2	48	72.7	65	63.7
\$3.00 to \$4.00/hour	15	41.7	6	9.1	21	20.6
More than \$4.00/hour	1	2.8	1	1.5	2	2.0
No Response	1	2.8	4	6.1	5	4.9
Total	36	100	66	100	102	100

and percent of female respondents got their first job through the use of the State Employment Offices. Eleven, or 16.7 percent, of the female respondents obtained their first job through personal applications. The second largest method used by females to obtain their first job with twelve respondents (18.2 percent) was a field's assistance. Only five males (13.9 percent) relied upon this method. A combined total population of 9.8 percent of the respondents obtained their first job through newspaper ads, while private employment services accounted for another 10.8 percent. For a complete breakdown of methods used in obtaining their first job, refer to Table 14 (p. 140).

When asked if their present job is the same as they had wanted while in their high school cooperative work experience program, twenty-four male respondents said it was not. The majority of female respondents (thirty-eight or 57.5 percent) said it was. The combined total response was nearly split into halves, with fifty respondents (49 percent) recording a yes, while fifty-two respondents (51 percent) gave a negative answer. Table 15 (p. 141) lists all of the responses to this question.

Table 15 also provides the responses to the question of whether respondents were satisfied with their present jobs. A majority of the respondents claimed to be satisfied with their current employment. Twenty-three males (63.9 percent of the population) responded positively. An even larger majority of the females (fifty-five or 83.3 percent) answered affirmatively.

Table 14. METHODS USED BY THE 1971 COOPERATIVE WORK EXPERIENCE PROGRAM STUDENTS SURVEYED IN OBTAINING THEIR FIRST JOB

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Through Parents	7	19.4	2	3.0	9	8.8
Through a Friend	5	13.9	12	18.2	17	16.7
School Placement Office	3	8.3	20	30.0	23	22.5
State Employment Service	7	19.4	2	3.0	9	8.8
Private Employment Service	4	11.1	7	10.6	11	10.8
Newspaper	2	5.6	8	12.1	10	9.8
Other	7	19.4	11	16.7	18	17.6
No Response	1	2.8	4	6.1	5	4.9
Total	36	100	66	100	102	100

Table 15. VALUE STATEMENTS PERTAINING TO SECONDARY COOPERATIVE WORK EXPERIENCE PROGRAM TRAINING

Present job is same as I always wanted while in the high school cooperative work experience program.

	Males			Females			Combined Total		
	Number	Percentage	Mean	Number	Percentage	Mean	Number	Percentage	Mean
Yes 1	12	33.4	1.66	38	57.5	1.43	50	49.0	1.51
No. 2	24	66.7		28	42.5		52	51.0	

I am satisfied with my present job.

Yes 1	23	63.9	1.36	55	83.3	1.18	78	76.5	1.24
No. 2	13	36.1		11	16.7		24	23.5	

My Cooperative Work Experience training was representative of a lifelong occupational desire.

Yes 1	8	22.2	1.78	33	50.0	1.50	41	40.2	1.60
No. 2	28	77.8		33	50.0		61	59.8	

My Cooperative Work Experience training was similar to my occupational interest while in high school.

Yes 1	16	44.4	1.56	56	84.8	1.15	72	70.6	1.29
No. 2	20	66.6		10	15.2		30	29.4	

My present job is meeting the expectations I had while in the high school Cooperative Work Experience Program.

Yes 1	11	30.6	1.60	40	60.6	1.39	51	50.0	1.50
No. 2	25	69.4		26	39.4		51	50.0	

Combined, 76 percent of the respondents indicated current job satisfaction.

Of the one hundred two (102) respondents, sixty-one (59.8 percent) stated that their high school cooperative work experience training did not represent a lifelong occupation. Table 15 (p. 141) shows that among the female population, thirty-three (50 percent) claimed that the program training reflected their occupational desires. A majority of twenty-eight (77.8 percent) of the male respondents said that the training received did not represent their occupational desire. But when asked if their high school cooperative work experience program training was similar to their occupational interest, a majority of the respondent population answered positively. Out of the one hundred two (102) returned questionnaires, seventy-two (72.6 percent) respondents indicated that the training they received was similar to their occupational interest. Specifically, a majority of fifty-six (84.8 percent) of the female respondents caused this figure to be so high. Only sixteen (44.4 percent) of the male respondents agreed with the majority of the females.

When asked whether or not their present job was meeting the expectations they had while in their high school cooperative work experience program, 50 percent of the one hundred two (102) total respondents said yes and 50 percent said no. Forty (60.6 percent) of the females agreed that their expectations were being met, but only eleven (30.6 percent) of the males agreed. A majority of twenty-five or 69.4 percent of the males stated that the expectations

they had while in their high school cooperative work experience program were not being met by their current employment. Complete responses to these questions may be found in Table 15 (p. 141).

When asked to compare cooperative work experience training received with their first job held after leaving high school, 49 percent of the respondents claimed that they received cooperative work experience program training in the exact same area. Table 16 (p. 144) shows that fourteen (38.9 percent) of the male respondents were first employed in areas exactly the same as the cooperative work experience training they received. A majority of thirty-six (54.5 percent) of the female respondents got their first job in the same area as their cooperative work experience training. A much larger percentage of the one hundred two (102) respondents (sixty-seven or 65.7 percent) claimed that their first job was related to their cooperative work experience training. This was broken down into eighteen (50 percent) males and forty-nine (74.2 percent) females; "yes" responses to the above question.

Table 17 (p. 145), demonstrates that a gradual decline appears in the number of respondents currently working in the same area as their cooperative work experience program training. After the lapse of two years time, only forty-seven or 46.1 percent of the one hundred two (102) respondents are working in the same area as the training. Male respondents show that only six (16.7 percent) are still employed in their training area, while among the female respondents, thirty-six (54.5 percent) are so employed. This same

Table 16. FIRST JOB COMPARED TO THE TRAINING RECEIVED BY THE 1971 SECONDARY COOPERATIVE WORK EXPERIENCE PROGRAM STUDENTS SURVEYED

First Job was Exactly the Same as Cooperative Work Experience Training.

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Yes	14	38.9	36	54.5	50	49.0
No	22	61.1	30	45.5	52	51.0
Total	36	100	66	100	102	100

First Job was Related to Cooperative Work Experience Training Received

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Yes	18	50.0	49	74.2	67	65.7
No	18	50.0	17	25.8	35	34.3
Total	36	100	66	100	102	100

Table 17. CURRENT EMPLOYMENT STATUS OF 1971 SECONDARY COOPERATIVE WORK EXPERIENCE PROGRAM STUDENTS SURVEYED

Currently Working in Same Area as Cooperative Work Experience Training.

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Yes	6	16.7	36	54.5	42	41.2
No	30	83.3	30	45.5	60	58.8
Total	36	100	66	100	102	100

Currently Working in Area Related to Cooperative Work Experience Training.

	Males		Females		Combined Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Yes	11	30.6	36	54.5	47	46.1
No	25	69.4	30	45.5	55	53.9
Total	36	100	66	100	102	100

decline also appears in the number of respondents who are currently working in areas related to their cooperative work experience program training. Of the one hundred two (102) respondents, only forty-seven (46.1 percent) were currently employed in areas related to their cooperative work experience training. The males were represented by eleven (30.6 percent), while the females still had a majority of thirty-six (54.5 percent).

Table 18 (pp. 147-148) provides a breakdown of responses to the set of questions used to ascertain respondents' attitudes about their cooperative work experience program. Because the question asked for a response based upon a Likert-type scale, a 1 represents strong disagreement; 2, disagreement; 3, undecided; 4, agreement; and 5, strong agreement. The first question was whether or not, if given the chance, the respondents would again enroll in a cooperative work experience program. The combined response of the one hundred two (102) questionnaires returned was 5 (strongly agree). The male population was not as adamant with their responses as the female population. The male's own response was only 4.33 with a median of 4. This represents agreement, but the variance was .78. On the other hand, the female response was a strong agreement with a mean of 4.6 and with a median of 5 and a small variance of .39.

When asked if they would recommend the cooperative work experience program to other students in high school today, the respondents answered in almost the exact manner as they had to the previous question. The response of the total population surveyed was a

Table 18. ATTITUDINAL VARIABLES

If I were back in high school today, I would take a Cooperative Work Experience Program

Males			Females			Combined Total		
Mean	Median	Variance	Mean	Median	Variance	Mean	Median	Variance
4.31	4	.79	4.64	5	.39	4.52	5	.55

I would recommend the Cooperative Work Experience Program to other students in high school today

Males			Females			Combined Total		
Mean	Median	Variance	Mean	Median	Variance	Mean	Median	Variance
4.33	4	.74	4.64	5	.42	4.53	5	.55

High School Cooperative Work Experience Program was helpful in my employment opportunities

Males			Females			Combined Total		
Mean	Median	Variance	Mean	Median	Variance	Mean	Median	Variance
3.39	4	1.22	3.71	4	1.56	3.60	4	1.45

I believe that the high school Cooperative Work Experience Program was beneficial part of my total education

Males			Females			Combined Total		
Mean	Median	Variance	Mean	Median	Variance	Mean	Median	Variance
4.08	4	1.11	4.11	4.5	1.45	4.10	4	1.32

Because of my high school Cooperative Work Experience Program, I feel more satisfied with the work I am doing today

Males			Females			Combined Total		
Mean	Median	Variance	Mean	Median	Variance	Mean	Median	Variance
2.89	3	1.30	3.5	3	1.73	3.06	3	1.58

Table 18. (Continued)

I would like to have had more cooperative work experience training.

Males			Females			Combined Total		
Mean	Median	Variance	Mean	Median	Variance	Mean	Median	Variance
3.53	4	1.80	3.89	4	1.20	3.76	4	1.43

Had it not been for the Cooperative Work Experience Program, I would probably have dropped out of high school.

Males			Females			Combined Total		
Mean	Median	Variance	Mean	Median	Variance	Mean	Median	Variance
1.81	2	.79	1.27	1	.48	1.46	1	.65

mean of 4.53 with a median of 5 and a fairly small variance of .55. These results indicate a strong recommendation of the program.

In replying to the question asking if the cooperative work experience program was helpful in their individual employment opportunities, both the male and the female respondents agreed. The variance for both groups was rather high (1.45), demonstrating a wide range of views. Both groups also agreed that their cooperative work experience program was a beneficial part of their total education. The combined response had a mean of 4.10 with a median of 4. The variance was fairly high at 1.32, again demonstrating a divergence of view.

The response to the question asking if, because of their high school cooperative work experience program, they are more satisfied with the work they are currently engaged in, the total reply was indecisive. The overall mean of 3.06 and a median of 3 demonstrated a solid indecision. The male and female responses were very similar and the combined variance of 1.5 demonstrates a similarity of responses between each group.

Both response groups agreed in their answers to the questions asking if they would have liked to have had more cooperative work experience training. A median of 4, representing agreement, was obtained from both the male and the female respondents. A combined total variance of 1.43 was an accurate description of the range of variance for both groups of respondents.

FINDINGS RELATED TO THE NULL HYPOTHESIS

Part II of the instrument was a 54-statement questionnaire used in the study to test the null-hypothesis. Of these 54 statements, only 47 were actually used in the testing of the null-hypothesis. Seven of the statements were interdispersed to gain responses to perceived attitudes about statements commonly associated with secondary cooperative work experience programs. The information provided by the 7 statements was discussed in the section covering demographic data (Table 18, p. 147-148). On all 54 statements, the respondents were asked to record their level of agreement or disagreement on a five point Likert-type scale. Responses ranged from strongly agree to strongly disagree, and point values ranging from 5.0 (for agree strgonly) to 1.0 (for disagree strongly) were assigned to each response.

In order to statistically test the null hypothesis, each of the 47 criterion variable statements was analyzed, using the F statistic with the .05 level of significance being used to determine where differences existed among the mean scores between the groups of male and female. The F-test of analysis of variance for single classification (the one-tailed significance test) was used to determine where specific differences existed between mean scores of the two groups when the statements were rejected. Basically, the analysis of variance using the F-test provided the method used for testing the hypothesis that the two group population means were equal.

In testing the 47 criterion variable statements, the null hypothesis (which states that there is no significant difference among the mean scores of the two groups) was retained for all 47 statements. The group means and the results of the contrasts in the analysis of variance for the 47-criterion variable statements are included in Table 19 (pp. 152-165).

For purpose of analysis, the 47 criterion variable statements were grouped into two major categories: Goal I, Occupational Preparation; Goal II, Self Understanding. The first category (Goal I, Occupational Preparation) had a total of twelve variates. These twelve variates were the twelve instructional objectives previously identified as supporting this goal. Thirty-three criterion variable statements were used to test the null-hypothesis of the first category. The second category (Goal II, Self Understanding) had six identified instructional objectives (variates). These six instructional objectives were used as the variate for the second category. Fourteen criterion variable statements were used to test the null-hypothesis for Goal II. Because, as previously mentioned, none of the criterion variables had been found to be significantly different, the null-hypothesis for both categories (or Goals) can be accepted. Therefore, the null that was tested:

H_0 , There is no significant difference between the identified instructional goals and objectives of the Cooperative Work Experience Programs that exist in selected Oregon secondary schools, and

Table 19. RESPONSES TO VARIABLE STATEMENT OF IDENTIFIED COOPERATIVE WORK EXPERIENCE INSTRUCTIONAL GOALS AND OBJECTIVES MADE BY SURVEYED POPULATION.

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
I. Occupational Preparation	1.	Provide exploration of a variety of work opportunities and working conditions.					
		-My cooperative work experience program provided me with information useful in all kinds of jobs.	3.67	3.08	3.28	1.42	Retain
		-While in high school my cooperative work experience program gave me a chance to participate in a variety of work situations with different working conditions.	3.50	3.56	3.54	1.22	Retain
	2.	Prepare students so they shall be able to make needed adjustments to fellow workers, their immediate foremen or supervisors, and to their employer, as well as clients.					
		-My cooperative work experience program taught me how to get along with the people I must work with on the job.	3.53	3.61	3.58	1.58	Retain

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
I.		-When I got my first job I was better prepared to work with other people because of my high school cooperative work experience program.	3.64	3.89	3.80	2.17	Retain
	3.	Provide the student with an opportunity to become familiar with the complexity of tasks that comprise a job.					
		-Because of my cooperative work experience program I became acquainted with many skills that make up a job.	3.58	3.85	3.75	1.44	Retain
		-The cooperative work experience program I had helped me to become aware of the skills that I needed to perform on the job.	3.69	3.82	3.77	1.63	Retain
	4.	Provide the student with the characteristic skills, duties, and practical understanding associated with a chosen occupation.					
		-My cooperative work experience program provided the training needed for employment in my chosen occupation.	2.69	3.56	3.25	1.45	Retain

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
I. Occupational Preparation	4.	-My cooperative work experience job was in an area that I would like to work in today.	2.89	3.73	3.43	1.02	Retain
		-My cooperative work experience job was in an area that I had chosen to work in.	2.86	3.97	3.58	1.25	Retain
	5.	Provide the student with the skills necessary to obtain entry level employment under completion of the cooperative work experience program.					
		-My cooperative work experience program was helpful in getting my first job after I left high school.	3.00	3.71	3.46	1.36	Retain
		-My cooperative work experience job gave me the technical preparation so that I could get a job after I got out of high school.	3.36	3.85	3.68	1.16	Retain
		-Because of my cooperative work experience program I feel I was better prepared for employment after leaving high school than my classmates who were not in the cooperative work experience program.	3.56	4.06	3.88	1.34	Retain

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
I. Occupational Preparation	6.	Provide the students curricula which offers skills and knowledge required by current and future job opportunities.					
		-My cooperative work experience program related classroom work helped me develop the skills and knowledge needed to get my first job after leaving high school.	2.81	3.39	3.19	1.13	Retain
		-I can still use the skills and knowledge I gained from my cooperative work experience program to get a job today.	4.03	4.24	4.17	1.56	Retain
		-I believe that the skills and knowledge I learned in my cooperative work experience program will help me get a job in the future.	3.39	3.61	3.53	1.35	Retain
		-I feel I have a better job today because of my cooperative work experience program than many of my former classmates who were not in the program.	2.94	3.41	3.25	1.20	Retain

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
I. Occupational Preparation	7.	Provide students with the needed education and training which will enhance occupational mobility and facilitate adjustment to new job requirements.					
		-My cooperative work experience program has made it easier for me to adjust more quickly to a new job situation.	3.67	3.62	3.64	1.25	Retain
		-Because of my cooperative work experience program I believe that I can more easily change jobs and locations.	3.06	3.36	3.25	1.81	Retain
	8.	Provide students with complete and current knowledge of alternative employment opportunities and career choices.					
		-Because of my cooperative work experience program I became familiar with other employment opportunities outside of the area I was working in.	3.92	3.36	3.56	1.42	Retain

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
I. Occupational Preparation	8.	-Because of my cooperative work experience I became aware of career choices available to me that I had never thought about before taking the program.	3.47	3.36	3.40	1.53	Retain
		-Because of my cooperative work experience program I had a better understanding of what type of work I wanted to do for a living.	3.28	3.74	3.58	1.04	Retain
	9.	Provide students with up-to-date information on the current and future trends in local and regional labor markets.					
		-My cooperative work experience program provided me with needed information on the current and future trends of the local and regional labor markets.	3.31	3.02	3.12	1.34	Retain
	10.	Provide students with the learning experiences which encourage sound safety practices, promote healthy work attitudes, and meet the needs of individual students.					

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
I. Occupational Preparation	10. Continued						
		-My cooperative work experience program taught me the safe working habits necessary for my chosen occupation.	3.33	3.70	3.57	1.15	Retain
		-I believe that my cooperative work experience program helped me develop positive work attitudes towards my chosen occupation.	3.56	3.68	3.64	1.50	Retain
		-My cooperative work experience job was the kind of work I wanted to have training in.	2.94	3.88	3.55	1.21	Retain
		11. Provide the student with related instruction that combines, and coordinates with field, shop, laboratory, cooperative work experiences which is appropriate to the vocational objective of the individual, which is sufficient duration to develop the competencies needed to fit him for employment in the occupation or occupational cluster for which he is being trained.					

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
I. Occupational Preparation	11. Continued						
		-My cooperative work experience program gave me a chance to learn the skills, knowledge and understanding required for my chosen occupation.	3.31	3.62	3.51	1.24	Retain
		-The cooperative work experience job I had was related to the vocational class I was enrolled in in high school.	3.25	3.79	3.60	1.09	Retain
		-My cooperative work experience job was long enough for me to learn the occupational skills necessary to get a job in the area I was training for.	3.17	3.81	3.65	1.06	Retain
		-I believe that my cooperative work experience program met my needs in preparing me for an occupation.	3.14	3.77	3.55	1.43	Retain

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
	12.	Provide students with the vocational instruction in occupational preparation that will assist them in choosing a career goal. This objective may be either a specific occupation or a cluster of closely related occupations in an occupational field.					
		-My cooperative work experience program assisted me in making a decision as to what occupation I wanted to pursue.	3.33	3.52	3.45	1.29	Retain
		-My cooperative work experience program has helped me select a life-long occupation.	2.58	3.02	2.86	1.39	Retain
		-The knowledge I got from my cooperative work experience program has helped in making career selections.					
		-The knowledge I got from my cooperative work experience program has helped me in my occupational experiences.	3.47	3.68	3.61	1.08	Retain

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
I. Occupational Preparation							
	1.	Provide the students with the opportunities needed to make discoveries and recognize attitudes and interests based upon their individual capabilities.					
		-My cooperative work experience program helped me to recognize an interest in an occupational area.	3.44	3.73	3.63	1.70	Retain
		-My cooperative work experience program helped me to discover my personal attitude towards an occupational area.	3.86	3.85	3.85	1.89	Retain
		-My cooperative work experience program helped me to understand my individual capabilities in an occupational area.	3.75	3.74	3.75	1.59	Retain

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
II. Self Understanding							
	2.	Provide the students with the opportunity to identify the satisfactions to be derived from work.					
		-My cooperative work experience program helped me to identify the satisfaction to be derived from work.	3.67	3.77	3.74	1.14	Retain
	3.	Provide the students with the recognition of suitability or lack of it for an occupational field.					
		-Because of my cooperative work experience program I discovered my individual suitability or lack of it for a particular occupational field.	3.58	3.61	3.60	1.23	Retain
	4.	Assist the student in developing his self-identity as a full-time worker and know better what manner of person he is--what strengths, limitations aspirations and personal values characterize him.					

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
II. Self Understanding							
	4. Continued						
		-My cooperative work experience program helped me to develop my self-identity as a full time worker.	3.14	3.45	3.34	1.41	Retain
		-My cooperative work experience program helped me to understand my personal strengths, limitations, and occupational aspirations.	3.50	3.59	3.56	1.37	Retain
		-My cooperative work experience program helped me to identify my personal values that relate to my occupational goals.	3.50	3.58	3.55	1.07	Retain
	5. Provide the student with the opportunity to see himself as a worker and understand first hand how he fits into the occupational area in which he has an interest and is involved.						

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
II. Self Understanding							
	5. Continued						
		-My cooperative work experience job gave me a chance to see himself as a worker.	3.94	4.03	4.00	1.11	Retain
		-My cooperative work experience program helped me to understand how I fit into the occupational area I was involved in.	3.75	3.86	3.82	1.47	Retain
	6. Assist the student in making a career choice which matches his individual abilities and interests to improve the probability of his achieving maximum job satisfaction and of making the best use of his abilities for maximizing his income.						
		-My cooperative work experience program taught me how to use my abilities to succeed on a job after I left high school.	3.56	3.74	3.68	1.28	Retain

Table 19. (Continued)

Goals	Objective No.	Objectives and Corresponding Variable Statements	Mean Response of the Two Groups		Combined Means	Computed F	Null Hypothesis
			Males	Females			
II. Self Understanding							
	6.	-My cooperative work experience program taught me how to use my abilities to succeed on a job after I left high school.	3.56	3.74	3.68	1.28	Retain
		-My cooperative work experience program helped me make a career choice which matched my interests and abilities.	3.06	3.53	3.36	1.00	Retain
		-My cooperative work experience program helped me to achieve job satisfaction.	3.33	3.55	3.47	1.14	Retain
		-I believe that my cooperative work experience program helped me to increase the wages I have received from my jobs.	2.81	3.05	2.96	1.64	Retain

*The significance level for testing the null hypothesis was set at .05. The tabulated F with one degree of freedom for the numerator and 101 degrees of freedom for the denominator was $F = 3.94$.

their specified outcomes as perceived by
former male and female students:

$$H_0: M_1 = M_2$$

has been accepted.

Because the null-hypothesis was been accepted in all criterion variable statements tested, it can be concluded that there were no experimental effects; that is, there are no significant differences between any two means in the two groups surveyed. With the null-hypothesis being accepted at the .05 level of the F ratio, the interpretation may be made that the two groups surveyed are merely random samples from the same normally distributed population of all seniors enrolled in an Oregon secondary cooperative work experience during the 1970-71 school year (Smith, 1970, pp. 120-121).

FINDINGS RELATED TO THE PERCEIVED CRITERION VARIABLE

Even though the null hypothesis was accepted, the perceived responses of the population surveyed in several cases demonstrated lack of agreement about the benefits and results of the instructional objectives. The range of the mean scores for the criterion variables of the instructional objectives found in Table 19 (pp. 152-165) indicates that the two groups generally agreed about the outcome of the instructional objectives. In order to determine where the discrepancies lie, the responses to all criterion variable statements for each instructional objective (variate) in both categories, or instructional goals, were compiled. From these results, a median

score was obtained indicating the perceived responses of both male and female groups as well as the combined population. Table 20, (pp. 168-173) lists both instructional goals and objectives with their corresponding median survey results. These median scores were based upon the recorded level of agreement or disagreement of the respondents on a five-point Likert-type scale to the combined criterion variable statements for each variate (instructional objective). Again, these responses ranged from agree strongly to disagree strongly and point values ranging from 5.0 (agree strongly) to 1.0 (disagree strongly). The response of 3.0, being the mid-point of the range, was interpreted as undecided. The median response is used for the interpretation of these results because it represents the typical group response. Because the null-hypothesis has proved to be successful, the population surveyed for this study can be interpreted as a reasonable random sample of the entire population (Smith, 1970, pp. 120-121). Therefore, the median response represents that point on the scale at or above which 50% of the population surveyed responded and at or below which the other 50% responded. The other strong value of the median response is that it gives a more typical outcome because it lessens the effects of extreme responses on both ends of the scale (Smith, 1970, p. 25).

Of the twelve variate statements (instructional objectives) grouped under Goal I, Occupational Preparation, seven were found to be acceptable to the combined total of respondents, and five were undecided upon.

Table 20: MEDIAN CRITERION VARIABLE RESPONSES TO THE VARIATE STATEMENTS.

Range Key: 1 = Disagree Strongly 4 = Agree
 2 = Disagree 5 = Agree Strongly
 3 = Undecided

Goals	Instructional Objectives	Median Response of the Two Groups		
		Male	Female	Combined Median
I. Occupational Preparation	1. Provide exploration of a variety of work opportunities and working conditions.	4	3	3
	2. Prepare students so they shall be able to make needed adjustments to fellow workers, their immediate foreman or supervisors, and to their employer, as well as clients.	4	4	4
	3. Provide the student with an opportunity to become familiar with the complexity of tasks that comprise a job.	4	4	4
	4. Provide the student with the characteristic skills, duties, and practical understanding associated with a chosen occupation.	3	4	3
	5. Provide the student with the skills necessary to obtain entry level employment upon the completion of the cooperative work experience program.	3	4	4

Table 20. (Continued)

Range Key: 1 = Disagree Strongly
 2 = Disagree
 3 = Undecided

4 = Agree
 5 = Agree Strongly

Goals	Instructional Objectives	Median Response of the Two Groups		
		Male	Female	Combined Median
I. Occupational Preparation	6. Provide the students curricula which offers skills and knowledge required by current and future job opportunities.	3	4	4
	7. Provide students with the needed education and training which will enhance occupational mobility and facilitate adjustment to new job requirements.	3	3	3
	8. Provide students with complete and current knowledge of alternative employment opportunities and career choices.	4	3	4
	9. Provide students with up-to-date information on the current and future trends in local and regional labor markets.	3	3	3

Table 20. (Continued)

Range Key: 1 = Disagree Strongly
 2 = Disagree
 3 = Undecided

4 = Agree
 5 = Agree Strongly

Goals	Instructional Objectives	Mean Response of the Two Groups		
		Male	Female	Combined Median
I. Occupational Preparation	10. Provide student with the learning experiences which encourage sound safety practices, promote healthy work attitudes, and meet the needs of individual students.	3	4	4
	11. Provide the student with related instruction that combines and coordinates with field, shop, laboratory, cooperative work experience and other occupational experiences which is appropriate to the vocational objective of the individual, which is of sufficient duration to develop the competencies needed to fit him for employment in the occupation or occupational cluster for which he is being trained.	3	4	4

Table 20: (Continued)

Range Key: 1 = Disagree Strongly
2 = Disagree
3 = Undecided

4 = Agree
5 = Agree Strongly

Goals	Instructional Goals	Median Response of the Two Groups		
		Male	Female	Combined Median
I. Occupational Preparation	12. Provide students with the vocational instruction in occupational preparation that will assist them in choosing a career goal. This objective may be either a specific occupation or a cluster of closely related occupations in an occupational field.	3	3	3
II. Self Understanding	1. Provide the students with the opportunities needed to make discoveries and recognize attitudes and interests based upon their individual capabilities.	4	4	4
	2. Provide the students with the opportunity to identify the satisfactions to be derived from work.	4	4	4

Table 20. (Continued)

Range Key: 1 = Disagree Strongly
 2 = Disagree
 3 = Undecided

4 = Agree
 5 = Agree Strongly

Goals	Instructional Objectives	Median Response of the Two Groups		
		Male	Femae	Combined Median
II. Self Understanding	3. Provide the students with the recognition of suitability or lack of it for an occupational field.	4	4	4
	4. Assist the student in developing his self-identity as a full-time worker and know better what manner of person he is -- what strengths, limitations, aspirations and personal values characterize him.	3	4	3
	5. Provide the student with the opportunity to see himself as a worker and understand first hand how he fits into the occupational area in which he has an interest and is involved.	4	4	4

Table 20. (Continued)

Range Key: 1 = Disagree Strongly
2 = Disagree
3 = Undecided

4 = Agree
5 = Agree Strongly

Goals	Instructional Objectives	Median Response of the Two Groups		
		Male	Female	Combined Median
II. Self Understanding	6. Assist the student in making a career choice with matches his individual abilities and interests to improve the probability of his achieving maximum job satisfaction and of making the best use of his abilities for maximizing his income.	3	3	3

Table 20 (pp. 168-173) shows that in many cases discrepancies existed in the median response between the two groups of male and female. Instructional Objective One, (Goal I) which states that secondary cooperative work experience programs will "provide exploration of a variety of work opportunities and working conditions," received a typical male response of agreement that their program had met this objective. But the typical female response was one of indecision.

Instructional Objective Two (Goal I), which said that secondary cooperative work experience programs will "prepare students so they shall be able to make needed adjustments to fellow workers, their immediate foreman or supervisors, and to their employer, as well as clients," was agreed upon by both the male and female respondents as having been accomplished by the program they had been enrolled in.

This same typical response was also found for Instructional Objective Three (Goal I), which states that the secondary cooperative work experience program will "provide the student with an opportunity to become familiar with the complexity of tasks that comprise a job."

The fourth variate (instructional objective) of Goal I, Occupational Preparation, was only agreed upon by females as having been met by their program. Typical male respondents were undecided as to whether their secondary cooperative work experience program had provided them "with the characteristic skills, duties, and practical

understandings associated with" their chosen occupation.

The typical response described above was found for Instructional Objective Five (Goal I), except that the combined total response demonstrated overall agreement. Even though the male respondents were typically undecided as to the success the program they were enrolled in had in providing them "with the skills necessary to obtain entry level employment upon completion of the program, the overall results of the total response population indicated agreement that this objective had been met.

This same result was true for Instructional Objective Six (Goal I). Though the males are undecided and the females in agreement, the combined population response typically agreed that their program had provided them with "curriculum which offered skills and knowledge required by current and future job opportunities."

There was complete undecidedness among both groups of respondents as to the effects of Instructional Objective Seven (Goal I). Both males and females typically responded that they were undecided whether the secondary cooperative work experience program they had been enrolled in had, in fact, provided them "with the needed education and training which will enhance occupational mobility and facilitate adjustment to new job requirements."

To Instructional Objective Eight (Goal I) respondents typically agreed that their cooperative work experience program had provided them "with complete and current knowledge of alternative employment opportunities and career choices." The female respondents were typically undecided as to the outcomes of this objective. But the

combined total of responses to this objective indicated agreement that the programs had generally accomplished this task.

Again, indecision was typical on the part of both groups of respondents to Instructional Objective Nine (Goal I). Neither group typically agreed or disagreed with the objective that their cooperative work experience program had provided them "with up-to-date information on the current and future trends in local and regional labor markets."

Instructional Objective Ten (Goal I) again demonstrated a divergence of views between the typical response of males and females. Even though the female and combined total response were in agreement, the males were undecided whether their cooperative work experience programs had, in fact, provided them "with the learning experiences which encourage sound safety practices, promote healthy work attitudes, and meet the needs of the individual students."

The typical response was given for Instructional Objective Eleven (Goal I). Though the responses of the females and combined total population indicated agreement, the male responses were typically undecided whether their cooperative work experience program had provided related instruction, matching their occupational interest as well as the vocational program in which they were enrolled.

The last objective (No. 12) for Goal I, Occupational Preparation, had a completely typical response of undecidedness for both groups as well as the total population. Neither group typically

agreed or disagreed that their secondary cooperative work experience program had provided them "with the opportunities needed to make discoveries and recognize attitudes and interests based upon their individual capabilities."

Four of the six variate statements (instructional objectives) grouped under Goal II, Self Understanding, were in agreement as to having been accomplished by secondary cooperative work experience programs according to the typical response of the returned questionnaires. Two of the other variate statements (instructional objectives) were undecided upon as to whether or not these tasks had been accomplished.

Table 20 (pp. 168-173) again demonstrated discrepancies between the typical male and female responses to variate statements (instructional objectives) of Goal II. But for the first three identified instructional objectives of Goal II, unanimous agreement typified the response of both groups. Instructional Objective One (Goal II) which states that the secondary cooperative work experience program will "provide the students with the opportunities needed to make discoveries and recognize attitudes and interests based upon their individual capabilities," received a median score of 4 (agreement) from both the male and female respondents as well as the combined total population. These same results were found for Instructional Objective Two (Goal II) which states that secondary cooperative work experience programs have provided their students "with the opportunity to identify the satisfactions to be derived from work."

Also, both the male and female as well as the combined total response population typically agreed with Instructional Objective Three (Goal II), which said that their secondary cooperative work experience had provided them "with the recognition of suitability or lack of it for an occupational field." The median response of the male population was undecided as to the results of Instructional Objective Four (Goal II), which said that the cooperative work experience program was supposed to help them develop their self-identity as full-time workers. The typical female response to this instructional objective was agreement that their program had helped them characterize their individual strengths, limitations, aspirations, and personal values.

Again, both groups were unanimous in their typical responses to Instructional Objective Five (Goal II). The median response for males, females, and combined total population was a complete agreement with the belief that their secondary cooperative work experience program had provided them with the opportunity to see themselves as workers and "understand first hand how" they fit into the occupational area in which they had an interest and were involved.

The last instructional objective for Goal II, Self Understanding, was the only one to receive a combined response of "undecided" from both groups. The typical response to Instructional Objective Six (Goal II) could be interpreted to mean that the respondents were undecided whether or not their secondary cooperative work

experience program had helped them to make a career choice which matched their individual interest and/or abilities.

The results of these findings indicate that not all of the instructional objectives of both goals for Oregon secondary cooperative work experience programs received a typical positive response. The criterion variable statements (instructional objectives for Goal I, Occupational Preparation, were agreed upon only 7 out of 12 times by the female respondent population. For this same goal, the male respondent population agreed with only four of the instructional objectives. The combined male and female respondent population agreed on 7 of the 12 instructional objectives. This is not to say that those criterion variates (instructional objectives) that were not typically agreed upon were necessarily rejected. In all cases where a median of 4 (agreement) was not found, the response was indecisive (3). This response cannot be interpreted as representing disagreement about the secondary cooperative work experience program meeting all of their instructional objectives.

The overall median scores for the criterion variates (instructional objectives) for Goal II, Self Understanding, show that the combined total population agreed with the results of four of the six instructional objectives. Again the females typically agreed with five of the instructional objectives and were undecided about one. The male respondents typically agreed that the programs they had been enrolled in had met four of the instructional objectives for this goal, and were undecided upon in another two cases. As

in the test of the null hypothesis, the female response to the instructional objectives was typically more positive than that of the male respondents.

The Pearson Product-Movement Correlation was used to test the coefficients of responses between the criterion variables. But because none of the correlations were equal to or above .80, an interpretation of a strong correlation between criterion variables was difficult to make. Also, because of the unequal size of the two groups tested, the results of the product-movement correlation could not be interpreted as truly representative of the entire population.

On the last page of the questionnaire, following the criterion variable statements, an open-ended question allowed those persons responding to the survey the opportunity to write any additional comments about their individual secondary cooperative work experience program. Approximately one-third of both male and female respondents voiced personal opinions about their programs. Answers to this question varied greatly, but definite patterns emerged. Almost all of those who responded, indicated that the program was generally worthwhile and that they were finding it useful. These former students mentioned most often that learning how to cope with the working world and how to get along with customers, employers, and fellow employees, as well as developing responsibilities and self confidence, were most useful and important results to them. One representative summation was: "It was the best thing the school

had to offer. It helped me to learn how to work and get along with people." Practical experience with hands-on activities and the development of skills in specific areas were indicated as being useful to these students.

Even though some responses about individual programs were negative, the overwhelming response to the open-ended question was one of highest recommendation for cooperative work experience programs. The typical response can be characterized by the comment made by one female respondent: "I have nothing bad to say about this program -- only the best. My teacher, _____ made it most interesting and helpful. I advise every high school student I know to participate. It is a worthwhile and self-fulfilling project. I enjoyed my time and training and I would do it again if I were able."

The completed collection of the female written response to this open-ended question can be found in Appendix W (pp. 268). The male written responses are located in Appendix X (pp. 272).

Conclusions from the analysis of all the preceding data with resulting implications and recommendations are presented in Chapter V.

CHAPTER V

SUMMARY WITH CONCLUSIONS AND RECOMMENDATIONSINTRODUCTIONS

This chapter reviews, interprets, and draws conclusions from the data, and sets forth implications and recommendations for action. Although conclusions by one researcher may differ from those of others examining the same data, there are results of significance in this study.

The major purpose of this study was to determine if there were statistically significant differences among the former secondary cooperative work experience students as to the programs' instructional goals and objectives.

- To determine if there was a difference in the opinions of former students, male and female, as to the effectiveness of the identified instructional goals and objectives.
- To determine the instructional value perceived by former students of the occupational awareness and preparations offered by the cooperative work experience program in their former high schools.
- To determine if cooperative work experience programs have a significant effect upon preparing students to achieve their individual occupational objectives.

- To determine the effectiveness of cooperative work experience programs in meeting their identified goals and objectives based upon the perception of former students and objectives based upon the perception of former students of these programs.
- To determine the perceived effectiveness of the identified instructional goals and objectives of the selected cooperative work experience programs on the occupational endeavors of former students.
- To analyze the data to test the null hypothesis that there is no significant difference among the opinions of former students concerning the instructional goals and objectives of secondary cooperative work experience programs.
- To list recommendations for additional research and teacher activities in secondary cooperative work experience programs.

PROCEDURES

The literature reviewed provided a rationale and background for the study. This review of related literature also guided the initial development of the questionnaire used in the study. The first phase of the development of the questionnaire was obtaining and classifying the instructional goals and objectives for cooperative work experience programs as identified by the Oregon State

Department of Education.

The second phase consisted of contacting all the Cooperative Work Experience Coordinators of the eight secondary schools agreeing to participate in the study, in order to verify that the primary responsibilities of their programs were, in fact, the previously identified instructional goals and objectives.

Based upon this information, the questionnaire was constructed and submitted to a jury of experts, who evaluated it for format, content, and clarity of the instructions and statements.

Before submitting the questionnaire to the sample population, it was field tested on selected students to determine its readability and ease of response. Upon completion of this procedure, a final copy of the questionnaire was compiled and printed.

A mail survey questionnaire containing two parts was used. The first part of the questionnaire consisted of 25 demographic and personal characteristic statements. The second part contained 7 statements requesting a perceived attitude about cooperative work experience and another 47 criterion variable statements, together with a five-point Likert-type score used in this study to test the null hypothesis. The criterion variables in the study were scores fundamentally assigned by respondents in the survey to denote their level of agreement or disagreement with each of the 54 statements in Part Two of the questionnaire.

The study's population utilized the secondary schools in Oregon having cooperative work experience programs that had been

approved for the 1970-71 school year by the Oregon State Department of Education, Division of Vocational Education. In all, 41 secondary school districts were identified. The sample of the study consisted of all the senior students who had been enrolled in a cooperative work experience program during the 1970-71 school year in eight previously selected high schools. This identified population was made up of 80 males and 126 females. Of the 206 questionnaires mailed, a total of 36 males, and 66 females returned theirs. Hence, the sample consisted of 102 respondents.

The information from each returned questionnaire was checked, coded, and transferred to IBM cards for computer processing.

ANALYSIS OF DATA

The information gained from the demographic data statements was compiled into tables in order that interpretations of the personal and occupational characteristics of the respondents could be determined. This information was then used to draw corresponding comparisons between the two groups of former secondary cooperative work experience students.

The null hypothesis of this study was tested by a one-way classification analysis of variance using the F-ratio. The one-way classification analysis of variance measured the mean score differences among the two groups and was used to test the null hypothesis that there was no significant difference among the opinions of the two groups. The test statistic used to analyze contrasts among the mean scores for each criterion variable state-

ment was the F statistic with the .05 level of significance being used to determine differences existing among the two groups. For purposes of further analysis, the criterion variable statements were grouped into single categories according to the variate they were being used to test. The criterion variable statements were arbitrarily assigned to the variate categories and they were assumed to be indicative of the nature of the category.

INTERPRETATION OF PERCEIVED RESPONSES TO THE IDENTIFIED INSTRUCTIONAL GOALS AND OBJECTIVES

Moss (1967), Butler and York (1971a), and Wallace (1970a) had concluded from their research that follow-up studies on effectiveness of the instructional goals and objectives of cooperative work experience programs based upon former student perceptions and occupational experiences were greatly needed. A problem addressed by this research was to determine the effectiveness of the identified instructional goals and objectives of Oregon secondary cooperative work experience programs based upon the perceptions and occupational experiences of former students.

The general conclusion was that the two groups of male and female respondents resemble one another in their assessment of the effectiveness of the outcome of identified instructional goals and objectives for Oregon secondary cooperative work experience programs. The null hypothesis that there was no significant difference in the

perceived responses for the two groups tested was not rejected in any of the 47 comparisons. However, 5 of the 12 instructional objectives for Goal I, Occupational Preparation, did not receive a median agreement that those tasks had been accomplished by the programs in which the respondents had been involved. Also, only 4 of the 6 instructional objectives for Goal II, Self Understanding, were agreed upon by the respondents as having been accomplished by the Oregon secondary cooperative work experience program in which they had been enrolled.

Other conclusions from the responses to the identified instructional objectives for Goal I, Occupational Preparation, include:

1. Former female students of Oregon secondary cooperative work experience programs were generally undecided whether the program they had participated in had, in fact, provided them with exploration of a variety of work opportunities and working conditions. Yet, it was this very same group which agreed that their cooperative work experience had provided them with assistance in their post-high school occupational endeavors.
2. Former male students of Oregon secondary cooperative work experience programs were generally undecided whether the program they had participated in had, in fact, provided them with the characteristic

skills, duties, and practical understanding associated with a chosen occupation.

3. Former male students of Oregon secondary cooperative work experience programs were generally undecided whether the program they had participated in had, in fact, provided them with the skills necessary to obtain entry-level employment upon completion of their program.
4. Former male students of Oregon secondary cooperative work experience programs typically did not know whether the program they had participated in had, in fact, provided them with the skills and knowledge required by current and future job opportunities.
5. Former students of Oregon secondary cooperative work experience programs were typically undecided whether the program they had participated in had, in fact, provided them with the education and training needed to enhance occupational mobility and facilitate adjustment to new job requirements.
6. Former female students of Oregon secondary cooperative work experience programs were typically undecided whether the programs they had participated in had, in fact, provided them with knowledge of alternative employment opportunities and career choices.
7. Both former male and female students of Oregon secondary cooperative work experience programs

were typically undecided whether the programs they had participated in had, in fact, provided them with up-to-date information on the current and future trends in local and regional labor markets.

8. Former male students of Oregon secondary cooperative work experience programs were typically undecided whether the programs they had participated in had, in fact, provided them with learning experience which had encouraged sound safety practices and promoted healthy working attitudes, which had met the needs of each individual student.
9. Former male students of Oregon secondary cooperative work experience programs were typically undecided whether the programs they had participated in had, in fact, provided them with the instruction and training experiences directly related to their individual interest.
10. The former students of Oregon secondary cooperative work experience programs were typically undecided whether the programs they had participated in had, in fact, provided them with the vocational instruction in occupational preparation that had assisted them in choosing a career goal.

Conclusions from the perceived responses to the identified instructional objectives for Goal II, Self Understanding, include:

1. Former male students of Oregon secondary cooperative work experience programs were typically undecided whether the programs they had participated in had, in fact, assisted them in developing their self-identity as a full-time worker.
2. The former students of Oregon secondary cooperative work experience programs were typically undecided whether the programs they had participated in had, in fact, provided them with assistance in making a career choice which matched their individual abilities and interests.

Based upon these results, a conclusion was drawn that the selected Oregon secondary cooperative work experience programs attempted to accomplish all of the identified instructional goals and objectives. In a majority of cases, the identified instructional goals and objectives were agreed upon by the respondents as having been accomplished by their individual programs. The response of indecision to a few of the instructional objectives does not indicate that the objectives were or were not accomplished. The conclusion that was drawn, based upon the undecided response, was that the individual programs were either not setting forth the instructional objectives which could be identified by the former students or these instructional objectives were not of significant importance to the program or to the individual students. It could not be concluded that the instructional objectives to which the

response were typically undecided had not accomplished their assigned task.

Secondary cooperative work experience programs, as offered in Oregon, were meeting a majority of the instructional goals and objectives, which have been identified as belonging to these programs. On the whole, the former students of these programs believe that what they were taught by their training experiences benefited their occupational endeavors after leaving high school. In no case were any of the identified instructional objectives rejected by the majority of the respondents.

CONCLUSIONS BASED UPON INTERPRETATION OF PERSONAL CHARACTERISTIC DATA

A number of conclusions could be drawn from the findings of this research into the opinions of former students concerning secondary cooperative work experience programs. The perceived opinions of the respondents regarding secondary cooperative work experience programs were one approach to establish meaningful relationships and understanding of the instructional goals and objectives involved in this program. The following conclusions were a result of this endeavor.

One of the indications of the success of cooperative work experience programs instructional goals and objectives is a comparison of the unemployment rate of these former students to the statewide population. By December, 1972 (approximately six months after leaving their program), 88.3 percent of the former secondary

work experience students surveyed had found employment. Even though this left 11.7 percent of the respondent population unemployed, the true unemployment rate is closer to 8 percent because of the former students who were not trying to find a job and therefore not in the open labor market. The significance of this unemployment rate is apparent when compared to the total unemployment rate for the State of Oregon during December, 1972. At that time, total unemployment rate for the State of Oregon was 4.8 percent. But the unemployment for the under 25 age group was 16.3 percent (Oregon State Department of Human Resources 1972). It is therefore concluded that the former secondary work experience program students demonstrated an unemployment rate less than one half of the state average for the age group within the first six months after leaving school. At the time of this survey (July, 1973), the results of these comparisons were even more significant. At this time the unemployment rate of the former secondary cooperative work experience students who responded to the survey fell to 5.9 percent. The statewide unemployment rate for the under 25 age group was 21.2 percent during July, 1973 (Oregon State Department of Human Resources, 1973). Based upon these comparisons of the unemployment rates of former students, it may be concluded that secondary cooperative work experience programs are successful in better preparing young people to enter the labor market. It would appear that former secondary cooperative work experience program students were better prepared to find and hold jobs than the general population for Oregon in the under 24-year-old age group population.

The female respondents to this survey were much less transient than the males in their occupational movement. Of the population that responded to this survey 41 percent of the females had remained on the original job they have had since leaving school. Only 14 percent of the male population still held their original job. A majority of the females (80 percent), have had a maximum of two different jobs since leaving school, whereas a majority of the male population (52 percent) who responded to the survey have had 3 to 5 different jobs since leaving school. Based upon this information, a conclusion was drawn that former female secondary cooperative work experience program students are more stationary in their occupational endeavors, and not nearly as mobile as the corresponding males. A possible reason for this may be that a majority of 54.5 percent of the female respondents got their first employment in exactly the same area where they had taken their secondary cooperative work experience training. A much smaller percentage of the male respondents got their first job in an area exactly the same as or related to their secondary cooperative work experience training. Of even more importance was the finding that a majority of the female respondents (54.5 percent) at the time of this survey (July, 1973), were working on a job in an area the same as or directly related to the secondary cooperative work experience program training. Only a small percentage of the male respondents were currently working in the same or related areas as their secondary cooperative work experience program training. These results, combined with the findings of female

stability in job changes, suggest that former students who get jobs in the same or related areas as their secondary cooperative work experience program training have a strong tendency to remain in that position.

Another reason why the former female students are less apt to change employment is that a majority of the respondents said that their present job is meeting the expectations they had while involved in their secondary cooperative work experience program. A large majority of the male respondents (69%) rejected this belief. A conclusion can then be drawn that because, in the majority of cases, the female respondents tend to stay on the job longer because the program expectations are being met and their training was related to their current occupation. Even more important, an overwhelming majority of the male respondents did not agree with this. Therefore, it may logically be concluded that the female respondents tend to have only one or two jobs over a two-year period because they are working in areas directly related to their secondary cooperative work experience training, and that this training was in an area that matched their individual occupational interests and expectations. Further supporting this conclusion was the fact that fifty percent of the female respondents stated that the secondary cooperative work experience program training they received was representative of a lifelong occupational desire they had held. Undoubtedly, it may be concluded that the primary reason the female respondents tend to remain on one job is that

the vast majority of them claimed they were satisfied with their present occupation.

The secondary cooperative work experience program helped bring about this current job satisfaction because in the case of the females, a majority of them stated that their present job was in the same area as their training and that their current job is the kind they wanted while they were enrolled in the program. Even though they may not have received training in an area related to their long term occupational goals, a majority of the male respondents also indicated that they were satisfied with their current job. This majority of satisfied secondary cooperative work experience program respondents indicates that one of the primary objectives of the program was being met.

Based upon the responses to the recommendation and attitudinal questions contained in the survey instrument, it was concluded that the majority of the respondents were not only satisfied with their current job, but were also satisfied with the training they received in their individual secondary cooperative work experience programs. This conclusion was derived from the response that a majority said that not only would they recommend the program to students enrolled in high school today; but also if they were in school again, they would re-enroll in a cooperative work experience program. Satisfaction with the secondary cooperative work experience program was further supported by the typical responses of former students when they agreed that the program had proved helpful in

their employment opportunities and that they considered it a beneficial part of their total education. Satisfaction of the program was best illustrated by the respondents' typical agreement in that they would have liked to have had more cooperative work experience training. It therefore could be concluded that a majority of the respondents were satisfied with their individual secondary cooperative work experience program.

The conclusion may be drawn that former male students of secondary cooperative work experience program begin their first job at a significantly higher wage level than their female counterparts. The majority of male respondents began their first job at a salary of \$2.00 an hour or higher. A much larger majority of the corresponding females started their first job at a wage level less than \$2.00 an hour. After two years in the labor market, 50 percent of the male respondents, who were working, were making more than \$3.00 an hour. At this same time 83.3 percent of the employed female respondents were working for a wage level less than \$3.00 an hour. It should be noted from these same results that less than 10 percent of the former program students, whose salaries are more than \$700.00 per month for full-time employment, are females. Indications were that these former secondary cooperative work experience program female students have not been trained for or were not entering the higher paying job areas.

It could be concluded from the results to the query as to how the respondents obtained their first job that Oregon secondary cooperative work experience programs could do more to help place

former students on jobs related to their individual training. Speaking out in answer to the question of how they got their first job, more than 75 percent of the respondents said they got their jobs without the assistance of their schools. Only about 20 percent said they received help from placement services provided by the school. This may be interpreted as one of the reasons why only 39 percent of the male respondents were able to find employment in the same area as their secondary cooperative work experience program training. An inference could be made that the Oregon secondary cooperative work experience programs need to place more emphasis upon placing former students in jobs related to the training they received.

Former students of Oregon secondary cooperative work experience programs are much more job-oriented in their post-high school education than the total population of high school graduates. Only 32 percent of the respondents enrolled for one or more college classes upon first leaving their high school. The national average for this same graduating class of high school students is approximately 58 percent (U.S. Department of Health, Education and Welfare, 1974). A sizable portion (23 percent) of the respondents did enter a formal occupational education program right after leaving school. Two years after leaving the secondary cooperative work experience program, only 3 percent of the respondents were still enrolled in a college program full-time, while 17 percent were continuing their education part-time. At the time of this survey (July, 1973), approximately 11 percent of the respondents were enrolled in a formal occupational

education program. Since leaving high school, approximately 36 percent of the respondents to this survey have completed some form of post-secondary education program. What is of even greater importance is that this group of former secondary cooperative work experience students was very aware of the continued need for individual education. Over 60 percent of the respondents said that they had plans to continue with some form of post-secondary education. Because the Oregon secondary cooperative work experience programs are not primarily aimed at students who plan to go on to college, but rather are directed toward the student who wants to get a job as soon as possible after leaving high school, the post-secondary educational experience of these respondents is significant. It was very apparent that these former program students were quite aware of the need for further education, and had taken steps to acquire it. Because a majority of these respondents had been involved in a formal education program since leaving high school, it may be concluded that Oregon secondary cooperative work experience programs are not just training students who end their education upon leaving high school. It cannot be said that these programs were teaching these students the need for further education without a great deal more research. But the inference can be made that former Oregon secondary cooperative work experience program students were aware of the need for continuing their education and in most cases set about doing it.

Based upon the data gathered by this study, former students of Oregon secondary cooperative work experience programs were

undecided whether or not the training they received had an effect upon current job satisfaction. This result is contrary to the findings of a study completed by Kingston (1970), where it was found that the majority of the former cooperative work experience students believed they were satisfied with current occupational positions because of the training they had received in their program.

It has long been held that secondary cooperative work experience programs are a deterrent to high school drop-outs. Former Oregon secondary cooperative work experience program students disagree strongly with this opinion. Of the one hundred two (102) respondents to this survey, not one agreed that the program had prevented them from dropping out of school. But, it must be taken into account that the sample population may have not contained actual program dropouts.

A conclusion could be reached based upon an interpretation of these findings that the majority of the former secondary cooperative work experience program students who left their first job after high school did so either for more money or to change their occupation. Only a very small percentage of former secondary cooperative work experience program students left their first job because they have been fired or laid off. Even though dissatisfaction with working conditions accounted for a sizable group of the respondents' reasons for leaving their first job when, compared to the total population, it was not really significant. The primary reason why a majority of the former secondary cooperative work experience

students had left their first job was that they either had found or believed they could find other employment elsewhere for more pay. The second largest group of former students who had left their first job did so because they were changing their individual occupations. The third sizable group to have left their first job were dissatisfied with the working conditions. A significant number of respondents said they had left their first job because they were getting married, going back to school, and/or going into the military services. Less than 10 percent of the respondents had left their first job because they had been laid off.

SUMMARY OF CONCLUSIONS

Evaluation of findings of this investigation of the identified instructional goals and objectives for Oregon secondary cooperative work experience programs led to the following conclusions:

- Secondary cooperative work experience programs, as they have been offered in Oregon, were meeting a majority of the instructional goals and objectives which have been identified. On the whole, former students believed they learned and benefited from the programs. The practice of offering secondary cooperative work experience programs for all segments of the secondary school population, as opposed to concentrating solely upon the potential dropout or the terminal student, is sufficiently in evidence throughout the state

as demonstrated by the responses to the questionnaire employed by this study.

- The practice of providing an opportunity for former students to evaluate the secondary cooperative work experience program is not a common one. In most instances, this valuable tool for program appraisal was not currently an integral part of the total operation according to Mr. Gerald Leadham, Oregon State Department of Education Specialist for Cooperative Work Experience Education.
- Former students of Oregon secondary cooperative work experience programs were more successful in obtaining and keeping their employment in comparison to the total population of youths under 25 years old in the state.
- The former female students of Oregon secondary cooperative work experience programs were much less mobile in their occupational experiences when compared to the corresponding group of former male students. During the first two years after leaving high school, the majority of the female students were employed and stayed on one or two jobs. A corresponding group of former male students had 3 to 5 different jobs in the same 2-year period.

- The majority of former female students of Oregon secondary cooperative work experience programs got their first employment after leaving high school in an area directly related to the training they had received. The corresponding group of former male students, in the majority of cases, did not get original employment in an area related to their secondary cooperative work experience training.
- Two years after leaving high school, a majority of former female students of Oregon's secondary cooperative work experience programs were employed in an area directly related to their past training experiences. Very few former male students of Oregon secondary cooperative work experience programs were employed in an area related to their training two years after leaving high school.
- A majority of former Oregon secondary cooperative work experience program students were satisfied with their jobs two years after leaving high school.
- A majority of former Oregon secondary cooperative work experience students would recommend the program to students enrolled in high school.
- A majority of former Oregon secondary cooperative work experience students agreed that the program

enhanced their employment opportunities and they considered it a beneficial part of their total education experiences.

- A majority of former male students of Oregon secondary cooperative work experience programs were employed on their first job after leaving high school at a higher wage than the corresponding group of former female program students.
- Two years after leaving high school, a majority of former male students of Oregon secondary cooperative work experience programs were receiving a higher wage than their former female classmates.
- The vast majority of former Oregon secondary cooperative work experience program students did not receive assistance from their individual high schools in locating their first job. The eight Oregon high schools that participated in this study assisted only a small proportion of their former cooperative work experience students in locating employment.
- A majority of former Oregon secondary cooperative work experience program students were aware of the need for continued post high school education and demonstration evidence of participating in the same.

- The majority of former Oregon secondary cooperative work experience program students, who left the first job they got after leaving high school, did so because they believed they could get higher pay somewhere else.
- The percentage of former Oregon secondary cooperative work experience program students, who were laid off their first job, was very small.
- A majority of former Oregon secondary cooperative work experience program students were not employed in the same kind of job that they wanted while in high school.
- A majority of former Oregon secondary cooperative work experience program students were satisfied with their current employment.
- A majority of former Oregon secondary cooperative work experience program students did not believe that the training they received while in high school represented an individual occupational desire.
- A significant majority of former Oregon secondary cooperative work experience program students received training while in high school, that was similar to their individual occupational interest.

- Based upon the comparison of results to the previous two responses, occupational interest of former secondary cooperative work experience program students did not necessarily represent individual lifelong occupational desire.
- A majority of former female Oregon secondary cooperative work experience program students felt that their present job was meeting the same expectations they had while in high school. A majority of the corresponding group of male students disagreed with this contention.
- Former students of Oregon secondary cooperative work experience programs were unsure as to whether or not their high school training had helped them in becoming satisfied with their current occupation.
- A majority of former Oregon secondary cooperative work experience program students agreed that they would liked to have had more of this type of training while in high school.

RECOMMENDATIONS

As a result of the findings and conclusions of this research, a number of recommendations have evolved, which could effect the growth and development of secondary cooperative work experience

programs in the State of Oregon.

1. Every effort should be made by secondary school districts, administrators, teachers, and personnel to include cooperative work experience programs as an integral part of their total curricula. The values to be derived by the student participants indicate the importance of such a program for youth.
2. Secondary cooperative work experience programs should be made available to all students interested, not only throughout the regular school year, but during vacations and summer recess as well. A number of students, particularly those with a crowded academic schedule and those active in co-curricular functions, could benefit from such a year-round program, particularly during the summer.
3. A continuing program of follow-up and evaluation should be initiated in the schools so that the results of secondary cooperative work experience programs might more accurately be assessed and perhaps improvement made to achieve the identified instructional goals and objectives, which have been set for it.

4. Students should be made aware of the identified instructional goals and objectives of secondary cooperative work experience programs. Thus, the students' experiences will have greater emphasis than was the case with the respondents in this study.
5. Secondary cooperative work experience program coordinators should take an active part in placing students on jobs related to their vocational training. The evidence from this study indicated that when trainees are placed in training stations that related to their vocational education and/or individual interest, they are more satisfied with the program outcomes. The results of this study definitely showed a need to give more help to students in placing them in jobs related to their training program.
6. In terms of the factors studied, there should be a greater effort made on the part of the secondary cooperative work experience programs in placing former students in post high school employment situations. These positions should be the same or directly related to the former student's cooperative work experience training. It was found that students who got jobs after leaving high school in the same area as their training

were more successful and satisfied than those who had not found work in their training area.

7. Indicators from this study were that former female students of Oregon secondary cooperative work experience programs were not being trained for, or were not entering the higher paying job areas. They and the Oregon secondary schools should be informed of these facts, and not only should females be encouraged to train for higher paying jobs, but employers should be encouraged to hire more secondary cooperative work experience trained females and to promote and pay them equally with males.
8. There exists a need on the part of the Oregon State Department of Education, Division of Vocational Education, to define more clearly the instructional goals and objectives for secondary cooperative work experience programs. This project should be undertaken with the close assistance of all Oregon secondary cooperative work experience program coordinators. The results of this study would certainly provide assistance in accomplishing this undertaking.

RECOMMENDATIONS FOR FURTHER STUDY

In this study, both groups of students surveyed had a background of high school cooperative work experience programs, and it would be worthwhile to know if such a background is a significant aid to beginning workers. Therefore, a study which would compare a group of beginning workers who have completed a secondary cooperative work experience program with a group from the same schools who do not have such a background, would be of value.

No attempt was made to evaluate the secondary cooperative work experience programs in this study. But it may prove meaningful to compare the results of this study with future results based upon the response to the questionnaire administered to former students of individual Oregon secondary cooperative work experience programs.

Further research is needed to develop the criteria for identifying effective secondary cooperative work experience programs. In fact, criteria indicators can be used to describe these programs if one considers effectiveness in terms of the advantages the programs provide for former students in their lifelong employment history.

An analysis of the factors related to success and satisfaction in secondary cooperative work experience programs which are also related to employment would provide information which may aid in more closely relating school directed training to the actual "world of work."

If this study is repeated, an attempt should be made to determine in more detail the reasons for the opinions expressed about satisfaction, value of training experience, helpfulness of the school services, and the values of the identified goals and objectives. Specific reasons need to be determined as to why so many of the respondents were undecided as to the outcomes of the identified instructional goals and objectives of Oregon secondary cooperative work experience programs.

An investigation should be undertaken to study methods for improving communications and the understanding of the instructional goals and objectives of Oregon secondary cooperative work experience programs. Further study should be made to secure information about how all parties concerned feel they could gain a better understanding of the instructional goals and objectives and their relationship to the cooperative work experience program.

Based upon the findings of this study, Oregon secondary cooperative work experience programs need to be evaluated in view of the number of former students working in areas related to their former training and methods for increasing this number. The findings from other studies reviewed indicate that lack of vocational guidance and understanding of occupations created a discrepancy between training received and actual employment. This study also points toward the need for research in increasing the awareness of Oregon secondary cooperative work experience coordinators of community employment needs and the occupational interests of students.

Finally, a state-wide or even a national study comparing former secondary students who had participated in cooperative work experience programs with a similar group who had not participated in such programs is essential to bring the question of the real values of the program into clear perspective.

Because of the increasing interest in and support of vocational education, and the prospects for greater expansion in Oregon secondary work experience programs, not only is it imperative because of the resources that will be expanded but also because of the students it will involve, that the best possible programs be developed and maintained.

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APPENDICES

APPENDIX A

OREGON STATE DEPARTMENT OF EDUCATION
SUGGESTED DEFINITIONS AND OBJECTIVES OF COOPERATIVE WORK EXPERIENCE

Objectives

1. A planned program
2. School and employer cooperation
3. Academic instruction
4. Vocational instruction
5. Related on-the-job training
6. Scheduling flexibility
7. Increased trainee education
8. Increased trainee employability

Identified general accepted goals of vocational education program, in which cooperative work experience is the vehicle through which these objectives are realized, are as follows:

- The student-trainee shall learn the characteristic skills, duties, and practical understanding associated with the occupation.
- The student-trainee shall acquire a proper set of work attitudes, rules of etiquette, and interpersonal skills involving relations with fellow workers, supervisors, and clients.
- The student-trainee shall develop his self-identity as a full-time worker to be, and shall know better what manner of person he is -- what strengths, limitations, aspirations and personal values characterize him.
- The student-trainee shall learn to see himself as a worker and understand first hand how he fits into the

occupational area in which he has an interest and is involved.

- The student-trainee shall develop the skills necessary to obtain entry level employment upon completion of the Cooperative Work Experience Program.

APPENDIX B

OREGON STATE DEPARTMENT OF EDUCATION
OREGON STATE PLAN FOR VOCATIONAL EDUCATION, 1973 pp. 170-171

Oregon Board of Education Plan

Provisions for Approval of Secondary Vocational Programs

Objectives of Instruction

- The program of instruction will be available for all persons of secondary school age or older, including those who have academic, socio-economic, cultural, physical, or other handicaps, who need or can profit from occupational education.
- Vocational education will be designed to prepare individuals for gainful employment or advancement in any recognized occupation except those which are generally considered to be professional or requiring a baccalaureate or higher degree.

Content of Instruction

- _ The program of vocational instruction will be based on a consideration of the most up-to-date skills, knowledges and understandings required in the cluster of occupations for which it is being provided. Programs will include planned, logical sequence of those essentials of education and experiences deemed necessary for individual

students to meet occupational objectives.

- The vocational programs are based on the advice and counsel of representatives from the occupational areas being served.
- There is reasonable expectation of employment opportunities in the occupational cluster as verified by advisory committee, the Oregon State Employment Service, or other sources.
- All students receiving vocational instruction in occupational preparation program will have a career goal. This goal may be either a specific occupation or a cluster of closely related occupations in an occupational field.
- The program of instruction will be sufficiently extensive in duration and intensive within a scheduled unit of time to enable the individual to develop the competency necessary to fit him for entry level employment in the occupational cluster for which he is being trained or to prepare for advanced training.
- The program of instruction will combine and coordinate related instruction with field, shop, laboratory, cooperative work, and other occupational experiences which is appropriate to the vocational objectives of the individual, which is of sufficient duration to develop the competencies needed to fit him for employ-

ment in the occupation or occupational cluster for which he is being trained, and which is supervised, directed, or coordinated by a person qualified under the provisions of the State Plan for Vocational Education.

APPENDIX D

OREGON STATE DEPARTMENT OF EDUCATION
EVALUATION PROJECT STUDY MANUAL FOR
LOCAL VOCATIONAL EDUCATION PROGRAMS
N.D. pp. 10-12

Goals and Objectives of Local Vocation Education Programs

Generalized Goal - To provide individuals with the opportunity to match their abilities and interests with skills and knowledge reflecting current and potential job opportunities and to enable these individuals and society to maximize the returns on their vocational education investment.

General Goal - To provide vocational education geared to Oregon's manpower and population needs based upon present and future labor market trends in order to prepare individuals for successful employment in jobs requiring less than a baccalaureate education so that these individuals can make the best of their abilities in order to achieve their goals.

Primary Goals

1. To identify potential students who want, need or could benefit from vocational education.
2. To identify vocational education and training needs of these students.
3. To provide facilities, programs and instructional personnel to meet the needs of students.

4. To provide vocational education curricula which reflects the educational and training requirements of existing and potential occupational opportunities in the local and regional labor markets.
5. To develop and conduct the vocational education program with the advice and assistance of persons possessing current and substantial knowledge of the occupations for which instruction is offered.
6. To improve the quality of education provided by vocational education.

Specific Objectives

1. To provide the opportunity for complete vocational education to all citizens who desire or who could benefit from occupational education.
2. To provide training programs to meet the special needs of the socio-economically, academically or physically disadvantaged.
3. To provide opportunity for individuals to acquire the attitudes and skills which will enable them to attain, regain and/or improve employment and maximize their labor earnings over a lifetime.
4. To maintain efficient communication among the state and local levels of vocational education; and among vocational educators, employers, unions, skilled craftsman, and individuals in need of occupational education.

5. To provide curricula which offers skills and knowledge required by current and future job opportunities.
6. To encourage a distribution of course offerings consistent with the relative distribution of regional and local labor markets.
7. To develop curricula in response to changing job requirements and labor market needs.
8. To develop and conduct each curriculum pattern, with the advice of an occupational advisory committee.
9. To modify distribution of course offerings and course content to meet changing job requirements of regional and local labor markets.
10. To provide vocational education and training which will enhance occupational mobility and facilitate adjustment to new jobs and job requirements.
11. To provide students with complete and current knowledge of alternative employment opportunities and career choices.
12. To provide students with up-to-date information on the current and future trends in local and regional markets.
13. To help students make career choices which match their individual abilities and interests to improve the probability of their achieving maximum jobs satisfaction and of making the best use of their abilities for maximizing their incomes.

14. To provide in-training guidance and counseling to help students achieve occupational objectives of the curriculum pattern in which they are enrolled.
15. To provide work-study programs for students in need of earnings.
16. To create learning experiences which encourages sound safety practices, promote healthy work attitudes, and meet the needs of the individual students.
17. To provide adequate field, shop, laboratory, cooperative or other occupational experiences for preparing students in an occupation or cluster of occupations.
18. To provide adequate equipment and facilities which reflect the technological changes in business and industry.
19. To provide instructional conditions which duplicate occupational situations and serve as a learning environment.
20. To provide for in-service teacher training to improve teaching competencies of occupational instructors.
21. To develop quality vocational education programs based on proven practices and which implement research findings.
22. To integrate vocational courses within general education or academic courses to form an occupational centered curriculum pattern.

23. To provide local employers and employment services with the occupational qualifications of vocational students completing a curriculum pattern.
24. To provide placement services in cooperation with other agencies for all vocational education students entering the job market.
25. To maintain adequate follow-up of former vocational education students.
26. To plan and organize a statement of future needs including cost for administration, guidance services, instruction, programs and facilities.
27. To establish priority for these future needs in terms of the requirements of potential students and of the regional and local labor market trends.
28. To encourage research of problems relating to vocational education programs.
29. To insure that the vocational education programs meets the general aims and objectives of vocational education consistent with local school philosophy and the Oregon State Plan for Vocational Education.
30. To insure that local vocational education programs continually progress toward these goals and objectives.

APPENDIX DOREGON STATE DEPARTMENT OF EDUCATION
OREGON BOARD OF EDUCATION GOALS

1.0 To help each individual function effectively as:

1.1 A self-directed but Responsible Individual

Each individual will increase awareness as a person, and acquire the knowledge to achieve and maintain personal health.

1.2 A Responsible Family Member

Each individual will learn of the rights and responsibilities of family members and how to strengthen and enjoy family life.

1.3 A Concerned Citizen

Each individual will learn of the rights and responsibilities of citizens of the community, state, and nation; learn to interact with people of different cultures, races, generations, and life styles; and learn to act responsibly toward the environment.

1.4 An Effective Producer

Each individual will learn of the world of work, learn to identify personal talents and interests, learn to make appropriate career choices and develop salable skills.

1.5 A Skilled Consumer

Each individual will acquire knowledge and develop skills relating to the management of personal resources in order to more successfully provide for personal and family security and meet obligations to self, family and society.

1.6 A Self-Renewing Individual

Each learner will develop the capacity to enrich his/her life through participation in scientific, cultural, esthetic, and other non-vocational activities.

1.7 A Life-long Learner

Each individual will master the basic skills of reading, writing, speaking, listening, computation, and problem-solving; and accept learning as a life-long process of self-development for work and leisure.

2.0 To give direction and assistance to educational programs that:

- 2.1 Are consistent with the goals of the Legislative Assembly and the Board of Education;
- 2.2 Place broad opportunities for education within reach of every Oregon citizen, including handicapped learners;
- 2.3 Reflect public understanding and support;
- 2.4 Place primary emphasis on the needs of the learner;
- 2.5 Meet the unique educational needs of each district;
- 2.6 Are staffed by personnel with competencies to achieve established educational goals;

- 2.7 Are financed through the equitable distribution, management, control, and budgeting of state and federal funds;
- 2.8 Reflect the effective planning, evaluation, and assessment of processes and outcomes; and
- 2.9 Are supported by legal safeguards for the health, safety, and welfare of staff and students as well as for their respective rights, responsibilities and authority.

APPENDIX E

COOPERATIVE WORK EXPERIENCE PROGRAM
INSTRUCTION GOAL IGoal: Occupational Preparation

Objectives:

1. Provide exploration of a variety of work opportunities and working conditions.
2. Prepare students so they shall be able to make needed adjustments to fellow workers, their immediate foremen or supervisors, and to their employer, as well as clients.
3. Provide the student with an opportunity to become familiar with the complexity of tasks that comprise a job.
4. Provide the student with the characteristic skills, duties, and practical understanding associated with a chosen occupation.
5. Provide the student with the skills necessary to obtain entry level employment upon completion of the cooperative work experience program.
6. Provide the students curricula which offers skills and knowledge required by current and future job opportunities.
7. Provide students with the needed education and training which will enhance occupational mobility and facilitate adjustment to new job requirements.

8. Provide students with complete and current knowledge of alternative employment opportunities and career choices.
9. Provide students with up-to-date information on the current and future trends in local and regional labor markets.
10. Provide students with the learning experiences which encourage sound safety practices, promote healthy work attitudes, and meet the needs of individual students.
11. Provide the student with related instruction that combines and coordinates with field, shop, laboratory, cooperative work experience and other occupational experiences which is appropriate to the vocational objective of the individual, which is of sufficient duration to develop the competencies needed to fit him for employment in the occupation or occupational cluster for which he is being trained.
12. Provide students with the vocational instruction in occupational preparation that will assist them in choosing a career goal. This objective may be either a specific occupation or a cluster of closely related occupations in an occupational field.

APPENDIX F

COOPERATIVE WORK EXPERIENCE PROGRAM
INSTRUCTION GOAL IIGoal: Self-Understanding

Objectives:

1. Provide the students with the opportunities needed to make discoveries and recognize attitudes and interests based upon their individual capabilities.
2. Provide the students with the opportunity to identify the satisfactions to be derived from work.
3. Provide the students with the recognition of suitability or lack of it for an occupational field.
4. Assist the student in developing his self-identity as a full-time worker and know better what manner of person he is -- what strengths, limitations, aspirations and personal values characterize him.
5. Provide the student with the opportunity to see himself as a worker and understand first hand how he fits into the occupational area in which he has an interest and is involved.
6. Assist the student in making a career choice which matches his individual abilities and interests to improve the probability of his achieving maximum job satisfaction and of making the best use of his abilities for maximizing his income.

APPENDIX G

SELECTED OREGON HIGH SCHOOLS AND PRINCIPALS INVOLVED

William R. Gray, Jr., Principal
Washington High School
531 S.E. 14th Avenue
Portland, Oregon 97214

John W. Blaser, Principal
Tillamook High School
2605 12th Street
Tillamook, Oregon 97141

Glenn E. Hill, Principal
Cleveland High School
3400 S.E. 26th Avenue
Portland, Oregon 97202

Mr. Gustkanas, Principal
Grant High School
2245 N.E. 36th Avenue
Portland, Oregon 97212

Eldore Baish, Principal
McMinnville High School
15th and Ford
McMinnville, Oregon 97128

John Thompson, Principal
Silverton High School
802 Schlador Street
Silverton, Oregon 97381

Darwin Shinn, Principal
Tigard High School
9000 S.W. Durham Road
Tigard, Oregon 97223

William Logan, Principal
Beaverton High School
2nd and Erickson
Beaverton, Oregon 97005

APPENDIX H

LETTER SENT TO HIGH SCHOOL PRINCIPAL REQUESTING ASSISTANCE

May 29, 1973

Dear Sir:

I am presently working in conjunction with Jerry Leadham, The Oregon Board of Education Specialist for Cooperative Work Experience, in developing an assessment instrument for determining the effectiveness of the Instructional Goals and Objectives of Cooperative Work Experience Programs as they have been identified by the Oregon State Board of Education.

At the present time the only available measurement of the effectiveness of cooperative work experience programs is evaluations based primarily upon economic outcomes. The vast majority of research data clearly demonstrates the occupational success of graduates from cooperative work experience programs. These programs are looked upon nationally as being the most successful of the various vocational education programs.

The program we are now faced with is the necessity of determining the effectiveness of the total cooperative work experience curriculum. Because we already have instruments for determining occupational placement of former students, we need to develop one which will determine what effectiveness the identified instructional goals and objectives are having in meeting the needs of the cooperative work experience students. It is our hope that this present research will lead to the development of an instrument through which we may assess the total cooperative work experience program effectiveness.

We are presently at the stage of attempting to field test the instrument. We have picked ten high schools throughout Oregon that had representative cooperative work experience programs in operation during the 1970-71 school year. These schools have been chosen on the basis of their representation of a cross section of Oregon's population, economic environment and local labor markets. Your school has been chosen because it is representative of these conditions.

The problem that arises is that the Verify files that are available at the Oregon Board are incomplete. From the files available we have been able to determine the number of graduating seniors who were involved in cooperative work experience programs at your school, as well as their sex and instructor. The problem that we are faced with is one of a bureaucratic foul-up. It appears that when the Verify system was completed someone inadvertently threw away the files that contained the addresses and phone numbers of these students. I realize it is a great inconvenience asking you to look up these addresses for us, but any help you can give will be greatly appreciated.

Enclosed is a list of the seniors at your school who were involved in cooperative work experience programs. If you would like any more information, please feel free to contact me at 754-2733, Vocational-Technical Education Division, OSU.

Yours truly,

Thoyd O. Latham

TOL/k1

APPENDIX I

LETTER MAILED TO COOPERATIVE WORK EXPERIENCE COORDINATORS
OF SELECTED HIGH SCHOOLS

FROM: Thoyd Latham, Coordinator
Cooperative Work Experience Instructional Goals
and Objectives Research Project
Industrial Education Department
302 Batchellor Hall
Oregon State University
Corvallis, Oregon 97331

I am presently working in conjunction with Jerry Leadham, the Oregon State Board of Education Specialist for Cooperative Work Experience, in developing an assessment instrument for determining the effectiveness of the instructional Goals and Objectives of Cooperative Work Experience Programs as they have been identified by the Oregon State Board of Education.

At the present time the only available measurement of the effectiveness of cooperative work experience programs is evaluation based primarily upon economic outcomes. The vast majority of research data clearly demonstrates the occupational success of graduates of cooperative work experience programs. These programs are looked upon nationally as being the most successful of the various vocational education programs.

The problem we are now faced with is the necessity of determining the effectiveness of the total cooperative work experience curriculum. Because we already have instruments for determining occupational placement of former students, we need to develop one which will determine what effectiveness the identified instructional goals and objectives are having in meeting the needs of the cooperative work experience students. It is our hope that this present research will lead to the development of an instrument through which we may assess the total cooperative work experience program effectiveness.

The reason that I am writing to you at this time is to ask you to take a few minutes of your time and review the enclosed identified instructional goals and objectives for cooperative work experience programs. Because cooperative work experience is an integral part of a total vocational education program you will notice the similarity of these identified instructional goals and objectives to those stated for all vocational education programs. But because cooperative work experience programs are only a part of the total vocational education program, the goals have been narrowed down to include only those directly related to cooperative work experience curriculum. What I would like you to do is read these identified goals and objectives and compare them with your cooperative work experience program.

Please feel free to mark on the list and add any comments you would like. If there are any objectives you believe do not apply to cooperative work experience programs please note and if you feel other objectives should be added, please do so. If you have already written a set of instructional goals and objectives for your own cooperative work experience program it would be greatly appreciated if you would send us a copy along with your remarks.

Sincerely yours,

Thoyd Latham

APPENDIX J

SUGGESTED REVISIONS FOR COOPERATIVE WORK EXPERIENCE EDUCATION
INSTRUCTIONAL GOALS AND OBJECTIVES

<u>Item No.</u>	<u>Suggested Revision</u>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
	<u>Suggested Additions</u> (New Items)
	<hr/>
	<hr/>
	<hr/>
	<hr/>
	<u>Additional Comments</u>
	<hr/>
	<hr/>
	<hr/>
	<hr/>

Note: If additional space is needed, please attach a separate sheet.

Return to: Thoyd Latham, Coordinator
Cooperative Work Experience Instructional Goals and
Objectives Research Project
Industrial Education Department
302 Batchellor Hall
Oregon State University
Corvallis, Oregon 97331

APPENDIX K

OREGON STATE DEPARTMENT OF EDUCATION
OREGON STATE PLAN FOR VOCATIONAL EDUCATION
1973, pp. 104-106

Goal 1: It is the goal of each cooperative work experience program approved by the Oregon Board of Education to provide education for persons who, through a cooperative management between the school and employers, receive their instruction, including required academic courses and related vocational instruction, through alternation of study in school with work on a job in any occupational field which complements the vocational class in which the student is enrolled. (The two experiences must be planned and supervised by the school and employers so that each contributes to the students' education and employability).

Objective

Cooperative work experience programs will be administered by the local educational agency and shall provide on-the-job training opportunities that may not otherwise be available to persons who can benefit from such programs.

Goal 2: Cooperative work experience programs shall provide on-the-job training that 1) is related to existing career opportunities that offer promotion and advancement; 2) does not displace other workers who perform such work; and 3) employs student-learners in conformity with federal, state and local laws and regulations, and in a manner not resulting in exploitation of the student-learner.

Training will be conducted in accordance with written training agreements, copies of which will be filed with the Oregon Board of Education.

APPENDIX L

COOPERATIVE WORK EXPERIENCE COORDINATORS OF SELECTED HIGH SCHOOLS

Linda Sanders, Cooperative Work Experience Coordinator
Washington High School
531 S.E. 14th Avenue
Portland, Oregon 97214

Mary Jensen, Cooperative Work Experience Coordinator
Tillamook High School
2605 12th Street
Tillamook, Oregon 97141

Ted Zahn, Cooperative Work Experience Coordinator
Silverton High School
802 Schlador School
Silverton, Oregon 97381

Don Fellers, Cooperative Work Experience Coordinator
Tigard High School
9000 S.W. Durham Road
Tigard, Oregon 97223

Ken Box, Career Education Director
Beaverton High School
2nd and Erickson
Beaverton, Oregon 97005

Frank Conrad, Cooperative Work Experience Coordinator
Cleveland High School
3400 S.E. 26th Avenue
Portland, Oregon 97202

Ken Rogers, Cooperative Work Experience Coordinator
McMinnville High School
15th and Ford
McMinnville, Oregon 97138

Dutch Kawasoe, Cooperative Work Experience Coordinator
Grant High School
2245 N.E. 36th Avenue
Portland, Oregon 97212

- Part II of this questionnaire is to be used to gather information as to the perceived results of cooperative work experience instructional goals and objectives.

Your procedure for registering your opinion is as follows:

1. Each statement is to be answered by circling the number which best represents your opinion of the statement.
2. There are five possible responses: Disagree Strongly; Disagree; Undecided; Agree; Agree Strongly.
3. Keep in mind that it is your opinion that is sought; there are no right or wrong responses.
4. Respond according to your present perceptions of your high school cooperative work experience program.
5. It is important that you respond to every item. Please do not leave any item unmarked.

Example: My cooperative work experience job was in
an area that I had chosen to work in.

<u>SD</u>	<u>D</u>	<u>U</u>	<u>A</u>	<u>AS</u>
1	2	③	4	5

*Cooperative work experience is a program of vocational education whereby through a cooperative arrangement between the school and employers, students receive instruction in required academic courses and related vocational instruction, by alternation of study in school and on the job training.

Part I

1. What is your age? _____
2. What is your present occupation? _____
 - 2.1 How long have you worked at your present job?
(Months) _____
3. How many months did it take you to find your first job
after leaving high school? _____

4. How many different jobs have you had since leaving high school?
-
5. Are you? (circle one)
- | | |
|--------------|---|
| 5.1 Married | 1 |
| 5.2 Single | 2 |
| 5.3 Divorced | 3 |
| 5.4 Widowed | 4 |
6. Are you presently (circle one)
- | | |
|----------------------------|---|
| 6.1 Employed full-time | 1 |
| 6.2 Employed part-time | 2 |
| 6.3 Unemployed | 3 |
| 6.3.1 Looking for work | 4 |
| 6.3.2 Not looking for work | 5 |
| 6.4 Self employed | 6 |
| 6.5 In the armed services | 7 |
| 6.6 Student | 8 |
| 6.7 Housewife | 9 |
7. If you are attending school please check the appropriate category.
- | | |
|---|---|
| 7.1 Attending a community college full-time | 1 |
| 7.2 Attending a community college part-time | 2 |
| 7.3 Attending a four-year college full-time | 3 |
| 7.4 Attending a four-year college part-time | 4 |
| 7.5 Attending a trade training school full-time | 5 |
| 7.6 Attending a trade training school part-time | 6 |
| 7.7 Participating in a planned, on-the-job training program | 7 |
8. If you have ever attended any of the programs listed in the above question, please list the number that matches the correct category.
-
9. What were your beginning wages on your first job after leaving high school? (forty-hour work week)
- | | |
|---------------------------|---|
| 9.1 Less than \$1.35/hour | 1 |
| 9.2 \$1.35 to \$2.00/hour | 2 |
| 9.3 \$2.00 to \$3.00/hour | 3 |
| 9.4 \$3.00 to \$4.00/hour | 4 |
| 9.5 More than \$4.00/hour | 5 |
10. What is the present wage you receive for a forty-hour week? (Use your last job if you are presently unemployed)
- | | |
|----------------------------|---|
| 10.1 Less than \$1.35/hour | 1 |
| 10.2 \$1.35 to \$2.00/hour | 2 |
| 10.3 \$2.00 to \$3.00/hour | 3 |
| 10.4 \$3.00 to \$4.00/hour | 4 |
| 10.5 More than \$4.00/hour | 5 |

- | | | |
|---|--|---|
| 11. How did you get your first job after leaving high school? | | |
| 11.1 Through my parents | | 1 |
| 11.2 Through a friend | | 2 |
| 11.3 School placement office | | 3 |
| 11.4 State Employment Service | | 4 |
| 11.5 Private employment service | | 5 |
| 11.6 Newspaper | | 6 |
| 11.7 Other (please specify) _____ | | |
-
- | | | |
|--|------------|-----------|
| 12. Is the job you have now the type of job you have always wanted? | <u>Yes</u> | <u>No</u> |
| | 1 | 2 |
| 13. Are you satisfied with your present job? | 1 | 2 |
| 14. Did your cooperative work experience job represent the kind of work you wanted to make a lifelong occupation? | 1 | 2 |
| 15. Was your cooperative work experience job very similar to your employment interests as a high school student? | 1 | 2 |
| 16. Is your present occupation meeting the expectations you had while you were still in the high school cooperative work experience program? | 1 | 2 |
| 17. Are you now working in the same occupation in which you had cooperative work experience training in high school? | 1 | 2 |
| 18. Is your present occupation nearly the same or closely related to the cooperative work experience training you had? | 1 | 2 |
| 19. Was your first job after leaving high school in exactly the same occupation you had cooperative training in? | 1 | 2 |
| 20. Was your first job after leaving high school closely related to the cooperative work experience you had? | 1 | 2 |
| 21. Have you completed any specific schooling or training program leading to a certificate of diploma since leaving high school? | 1 | 2 |
| 22. Do you plan to continue with some form of schooling in the near future? | 1 | 2 |

23. Are you presently employed at the same job you got after leaving high school? 1 2
- 23.1 If your answer is no to the above question, select one of the following that comes closest to describing the reasons you changed jobs.
- 23.1.1 More pay 1
 - 23.1.2 Better opportunities elsewhere 2
 - 23.1.3 Poor working conditions 3
 - 23.1.4 Wanted to change occupations 4
 - 23.1.5 Laid off 5
 - 23.1.6 Other 6

APPENDIX N

Part II of Questionnaire
Variate Statements

	Disagree Strongly	Disagree	Undecided	Agree	Agree Strongly
1. If I were back in high school today I would take a cooperative work experience program.	1	2	3	4	5
2. While in high school my cooperative work experience program gave me a chance to participate in a variety of work situations with different working conditions.	1	2	3	4	5
3. Because of my cooperative work experience program, I feel I was better prepared for employment after leaving high school than my classmates who were not in the cooperative work experience program.	1	2	3	4	5
4. Because of my cooperative work experience program, I had a better understanding of what type of work I wanted to do for a living.	1	2	3	4	5
5. The cooperative work experience job I had was related to the vocational class I was enrolled in in high school.	1	2	3	4	5
6. My cooperative work experience program helped me to understand my individual capabilities in an occupational area.	1	2	3	4	5
7. My cooperative work experience program helped me make a better choice which matched my interests and abilities.	1	2	3	4	5
8. I would recommend the cooperative work experience program to other students in high school today.	1	2	3	4	5

- | | | | | | |
|--|---|---|---|---|---|
| 9. My cooperative work experience job gave me the technical preparation so that I could get a job after I got out of high school. | 1 | 2 | 3 | 4 | 5 |
| 10. Because of my cooperative work experience, I became aware of career choices available to me that I had never thought about before taking the program. | 1 | 2 | 3 | 4 | 5 |
| 11. My cooperative work experience program gave me a chance to learn the skills, knowledge and understanding required for my chosen occupation. | 1 | 2 | 3 | 4 | 5 |
| 12. My cooperative work experience program helped me to discover my personal attitudes towards an occupational area. | 1 | 2 | 3 | 4 | 5 |
| 13. My cooperative work experience program taught me how to use my abilities to succeed on a job after I left high school. | 1 | 2 | 3 | 4 | 5 |
| 14. I believe that my cooperative work experience program helped me to increase the wages I have received from my job(s). | 1 | 2 | 3 | 4 | 5 |
| 15. The high school cooperative work experience program has been helpful in my employment opportunities. | 1 | 2 | 3 | 4 | 5 |
| 16. My cooperative work experience program taught me how to get along with the people I must work with on the job. | 1 | 2 | 3 | 4 | 5 |
| 17. My cooperative work experience program related classroom work helped me develop the skills and knowledge needed to get my first job after leaving high school. | 1 | 2 | 3 | 4 | 5 |
| 18. My cooperative work experience program provided me with needed information on the current and future trends of the local and regional labor markets. | 1 | 2 | 3 | 4 | 5 |
| 19. My cooperative work experience job was long enough for me to learn the occupational skills necessary to get a job in the area I was training for. | 1 | 2 | 3 | 4 | 5 |

- | | | | | | |
|---|---|---|---|---|---|
| 20. My cooperative work experience program helped me to identify the satisfaction to be derived from work. | 1 | 2 | 3 | 4 | 5 |
| 21. My cooperative work experience program helped me to achieve job satisfaction. | 1 | 2 | 3 | 4 | 5 |
| 22. My cooperative work experience provided me with information useful in all kinds of jobs. | 1 | 2 | 3 | 4 | 5 |
| 23. My cooperative work experience was helpful in getting my first job after I left high school. | 1 | 2 | 3 | 4 | 5 |
| 24. Because of my cooperative work experience program I became familiar with other employment opportunities outside of the area I was working in. | 1 | 2 | 3 | 4 | 5 |
| 25. My cooperative work experience job was the kind of work I wanted to have training in. | 1 | 2 | 3 | 4 | 5 |
| 26. My cooperative work experience program helped me to recognize an interest in an occupational area. | 1 | 2 | 3 | 4 | 5 |
| 27. My cooperative work experience program helped me to understand how I fit into the occupational area I was involved in. | 1 | 2 | 3 | 4 | 5 |
| 28. I believe that the high school cooperative program was a beneficial part of my total education. | 1 | 2 | 3 | 4 | 5 |
| 29. When I got my first job I was better prepared to work with other people because of my high school cooperative work experience program. | 1 | 2 | 3 | 4 | 5 |
| 30. I can still use the skills and knowledge I gained from my cooperative work experience program to get a job today. | 1 | 2 | 3 | 4 | 5 |
| 31. My cooperative work experience program taught me the safe working habits necessary for my chosen occupation. | 1 | 2 | 3 | 4 | 5 |
| 32. I believe that my cooperative work experience program met my needs in preparing me for an occupation. | 1 | 2 | 3 | 4 | 5 |

- | | | | | | |
|---|---|---|---|---|---|
| 33. Because of my cooperative work experience program I discovered my individual suitability or lack of it for a particular occupational field. | 1 | 2 | 3 | 4 | 5 |
| 34. Because of my high school cooperative work experience I feel more satisfied with the work I am doing today. | 1 | 2 | 3 | 4 | 5 |
| 35. My cooperative work experience job was in an area that I had chosen to work in. | 1 | 2 | 3 | 4 | 5 |
| 36. Because of my cooperative work experience program, I believe that I can more easily change jobs and locations. | 1 | 2 | 3 | 4 | 5 |
| 37. I believe that my cooperative work experience program helped me develop positive work attitudes toward my chosen occupation. | 1 | 2 | 3 | 4 | 5 |
| 38. The knowledge I got from my cooperative work experience program has helped me in my occupational experiences. | 1 | 2 | 3 | 4 | 5 |
| 39. My cooperative work experience job gave me a chance to see myself as a worker. | 1 | 2 | 3 | 4 | 5 |
| 40. I would like to have had more cooperative work experience training. | 1 | 2 | 3 | 4 | 5 |
| 41. Because of my cooperative work experience program I became acquainted with the many skills that make up a job. | 1 | 2 | 3 | 4 | 5 |
| 42. I believe that the skills and knowledge I learned in my cooperative work experience program will help me get a job in the future. | 1 | 2 | 3 | 4 | 5 |
| 43. My cooperative work experience program assisted me in making a decision as to what occupation I wanted to pursue. | 1 | 2 | 3 | 4 | 5 |
| 44. My cooperative work experience program helped me to develop my self-identity as a full-time worker. | 1 | 2 | 3 | 4 | 5 |
| 45. Had it not been for the cooperative work experience program I would probably have dropped out of high school. | 1 | 2 | 3 | 4 | 5 |

46. My cooperative work experience job was in an area that I would like to work in today. 1 2 3 4 5
47. I feel I have a better job today, because of my cooperative work experience program than many of my former classmates who were not in the program. 1 2 3 4 5
48. The knowledge I got from my cooperative work experience program has helped me in making career selections. 1 2 3 4 5
49. My cooperative work experience program helped me to identify my personal values that relate to my occupational goals. 1 2 3 4 5
50. The cooperative work experience program I had helped me to become aware of the skills that I need to perform on the job. 1 2 3 4 5
51. My cooperative work experience program has made it easier for me to adjust more quickly to a new job situation. 1 2 3 4 5
52. My cooperative work experience program has helped me select a lifelong occupation. 1 2 3 4 5
53. My cooperative work experience program helped me to understand my personal strengths, limitations and occupational aspirations. 1 2 3 4 5
54. My cooperative work experience program provided the training needed for employment in my chosen occupation. 1 2 3 4 5

If you have any additional comments, please feel free to add them in the space provided below.

APPENDIX O

QUESTIONNAIRE JURY OF EXPERTS

Dr. Pat Atteberry
Coordinator of Industrial Education
Oregon State University
Corvallis, Oregon 97331

Dr. Joel Galloway
Teacher Educator
Oregon State University
Corvallis, Oregon 97331

Dr. Joe Hlebichuk
Teacher Educator
Oregon State University
Corvallis, Oregon 97331

Dr. Wayne Courtney
Research Specialist and Teacher Educator
Oregon State University
Corvallis, Oregon 97331

Mr. Jerry Leadham, Specialist
Cooperative Work Experience
Oregon State Department of Education
942 Lancaster Drive, N.E.
Salem, Oregon 97310

APPENDIX P

TABLE FOR ANALYSIS OF VARIANCE FOR A ONE-WAY CLASSIFICATION

Source of Variation	Sum of squares	d.f.	Mean Square	Variance ratio
Between samples (column means)	$SSC = r \sum_j (\bar{x}_j - \bar{\bar{x}})^2$	$d.f._1 = c - 1$	$MSC = \alpha_c^2$	$F = \frac{\alpha_c^2}{\alpha_c^2}$
Within samples (residual error)	$SSE = \sum_{ij} (s_{ij} - \bar{x}_j)^2$	$d.f._2 = c(r - 1)$	$MSE = \alpha_c^2$	
Total	$SST = \sum_{ij} (x_{ij} - \bar{\bar{x}})^2$	$(c - 1) + c(r - 1)$

APPENDIX A

LETTER ACCOMPANYING FIRST MAILING OF QUESTIONNAIRE

July 10, 1973

To: Former Vocational Cooperative Work Experience Students

From: Project Director
Cooperative Work Experience Instructional Goals
and Objectives Research Project
302 Batchellor Hall
Oregon State University
Corvallis, Oregon 97331

You have been selected from a list of former vocational cooperative work experience students in the hope that your vocational classroom and on-the-job training that you participated in during your senior year of high school will provide an excellent source of authoritative information to be used in measuring the effectiveness of the cooperative work experience instructional goals and objectives.

We are aware of the demands on your time and are very appreciative of your personal assistance. The enclosed questionnaire takes only a few minutes to complete and can be returned in the enclosed stamped envelope. It is imperative that your response be included in our research so that we can present an accurate assessment of the opinions of former students concerning cooperative work experience programs.

If the program name cooperative work experience is unfamiliar to you, it may be that you were enrolled in a Diversified Occupations or a Distributive Education Program. The title cooperative work experience means that it was a vocational program that combined classroom experiences with on-the-job training.

The names of all respondents will not be identified in the final report and all comments will remain anonymous.

This is your chance to make your feelings known about part of your high school education that may assist in bringing about changes. Your early response would be greatly appreciated.

Thoyd Latham
Project Director

APPENDIX R

FIRST FOLLOW-UP LETTER TO QUESTIONNAIRE

July 21, 1973

To: Former Vocational Cooperative Work Experience Student

From: Project Director
Cooperative Work Experience Instructional Goals
and Objectives Research Project
302 Batchellor Hall
Oregon State University
Corvallis, Oregon 97331

This is a follow-up to a letter of July 10. If you have already responded to that letter, thank you for your help. If for some reason you have misplaced the original questionnaire, I am enclosing a second copy for your use at this time. It is very important to this research that we receive your reply. Following is an explanation of this project.

You have been selected from a list of former vocational cooperative work experience students in the hope that your vocational classroom and on-the-job training that you participated in during your senior year of high school will provide an excellent source of authoritative information to be used in measuring the effectiveness of the cooperative work experience instructional goals and objectives.

We are aware of the demands on your time and are very appreciative of your personal assistance. The enclosed questionnaire takes only a few minutes to complete and can be returned in the enclosed stamped envelope. It is imperative that your response be included in our research so that we can present an accurate assessment of the opinions of former students concerning cooperative work experience programs.

If the program name cooperative work experience is unfamiliar to you, it may be that you were enrolled in a Diversified Occupations or a Distributive Education program. The title cooperative work experience means that it was a vocational program that combined classroom experiences with on-the-job training.

The names of all respondents will not be identified in the final report and all comments will remain anonymous.

This is your chance to make your feelings known about part of your high school education that may assist in bringing about changes. Your early response would be greatly appreciated.

Thoyd Latham, Project Director

APPENDIX S

SECOND FOLLOW-UP LETTER TO QUESTIONNAIRE

July 28, 1973

To: Former Vocational Cooperative Work Experience Students

From: Project Director
Cooperative Work Experience Instructional Goals
and Objectives Research Project
302 Batchellor Hall
Oregon State University
Corvallis, Oregon 97331

This is a follow-up to a letter of July 21. If you have already responded to that letter, thank you for your help. If for some reason, you have misplaced the original questionnaire, I am enclosing a third copy for your use at this time. It is very important to this research that we receive your reply. Following is an explanation of this project.

You have been selected from a list of former vocational cooperative work experience students in the hope that your vocational classroom and on-the-job training that you participated in during your senior year of high school will provide an excellent source of authoritative information to be used in measuring the effectiveness of the cooperative work experience instructional goals and objectives.

We are aware of the demand on your time and are very appreciative of your personal assistance. The enclosed questionnaire takes only a few minutes to complete and can be returned in the enclosed stamped envelope. It is imperative that your response be included in our research so that we can present an accurate assessment of the opinions of former students concerning cooperative work experience programs.

If the program name cooperative work experience is unfamiliar to you, it may be that you were enrolled in a Diversified Occupations or a Distributive Education program. The title cooperative work experience means that it was a vocational program that combined classroom experiences with on-the-job training.

The names of all respondents will not be identified in the final report and all comments will remain anonymous.

This is your chance to make your feelings known about part of your high school education that may assist in bringing about changes. Your early response would be greatly appreciated.

Thoyd Latham, Project Director

APPENDIX T

CODING OF DATA CARDS

Data for each of the 102 respondents were coded on a card as follows:

Card 1

<u>Column</u>	<u>Code</u>
1	Identification of respondent by school.
2	Identification of respondent by sex.
3&4	Identification of respondent by number.
5	Identification of respondent by racial grouping.
6-19	Demographic data of respondents.
20-32	Personal Characteristics of respondents.
33-80	Data. Response values of 1, 2, 3, 4, or 5, which were assigned to the 54 variable statements.

CodeCard 2Column

1-6	Data. Response values 1, 2, 3, 4, or 5, which were assigned to the 54 variable statements.
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APPENDIX U

REPORTED OCCUPATIONAL POSITION PRESENTLY HELD
BY THE SECONDARY 1971 COOPERATIVE WORK EXPERIENCE
MALE STUDENTS SURVEYED

Aircraft Mechanic	1
Auto Body Man	1
Auto Parts Counterman	1
Black Top Layer	1
Bundle Tier	1
Carpenter	1
Construction Worker	1
Custodian	1
Electronic Technician	1
Equipment Operator	1
Farmer	1
Fork Lift Driver	1
Laborer	1
Landscaper	1
Lumber Mill Worker	2
Machinist	1
Mechanic	1
Operating Room Assistant	1
Plastic Mold Operator	1
Police Cadet	1
Plumber	1
Public Works (City)	1
Salesman	1
Student	2
Truck Driver	1
U.S. Air Force	1
U.S. Army	2
U.S. Navy	2
Welder	1
Unemployed	3
<hr/>	
Total	36

APPENDIX V

REPORTED OCCUPATIONAL POSITION PRESENTLY HELD
BY THE SECONDARY 1971 COOPERATIVE WORK EXPERIENCE
FEMALE STUDENTS SURVEYED

Advertising Sales Representative	1
Answering Service Operator	1
Assembly Worker	3
Assistant Editor	1
Bank Clerk	1
Beautician	4
Claims Clerk	1
Clerk	1
Clerk Typist	4
File Clerk	2
Girl Friday	2
Housewife	6
Key Punch Operator	1
Nurses/and or Aide	8
Nursery School Aide	1
Police Dispatcher	1
Receiving Clerk	1
Receptionist	2
Sales Clerk	2
Secretary	7
Supervisor	1
Student	6
Telephone Operator	2
Telephone Installer	1
Typist	2
Unemployed	4
	<hr/>
Total	66

APPENDIX W

ADDITIONAL COMMENTS BY THE SECONDARY 1971
COOPERATIVE WORK EXPERIENCE FEMALE STUDENTS SURVEYED

"My cooperative work experience was given to me without any understanding of the job or knowledge of the work. I also had all extra classes taken away, so I could only take the required subjects. I did not develop (sic) a good attitude (sic) towards my job and therefore didn't gain that much from the experience. Actually for me I seemed to loose contact from school and work. If the job was of my choice it might have made all the difference."

"The program helped me get an interview for my first job. But, after that it was a waste of time. Work experience should be: how to act at an interview, and what to expect at your job! Not silly essays on material that was not relevant to the job."

"I feel my cooperative work experience helped make me a better person. I am more independent, self-sufficient and aggressive than people I know who didn't work in high school, but also note: it is good to grow up so fast. Most of my friends like me took advantage of this program. We are more mature, have better jobs, but we missed a vital part of our youth, have settled into the 8 to 5, 40 hour week which really isn't such a great situation. I really shouldn't talk though because I am unusual in my job expectations. I expect more out of a company than I have gotten. I am again ready to switch jobs. I am 19 years old and supervisor of 3 women all older than me and frustrated in the place I work. My cooperative work experience did make me a good worker."

"The work experience program I was in did not help me in any way to find a job or to help me keep any job. I had to do it all myself. I did not have a counselor talk to me about my work. I feel being on that work experience program hurt me inschool work because I did not have enough classes to learn anything in."

"In my senior year I worked as a clerical typist and did odd jobs around the office. As I had already made my choice in the field of computers the skills I acquired (sic) while working in a clerical position were not helpful. But, as it was my first job I learned what I takes to work in a field of meeting and talking to people."

"I have nothing bac to say about this program - only the best. My teacher . . . made it most interesting and helpful. I advise every high school student I know to participate. It is a worthwhile and self-fulfilling project. I enjoyed my time in training and I would do it again if I were able."

"I feel work experience program is a very great idea, I really enjoyed working during hi-school. I think it should be continued. I had a lot better idea of the world out hi-school since I had worked and many of my friends were really blank in that respect."

"It doesn't really teach you to make a success of yourself when there is a big obstacle in your way. For example, when you won't kiss your supervisors feet so you get in bad with him. Also, you need to learn things to do when there is no work to be done."

"I feel very fortunate that I was able to have this training. Now after only 2 yrs. I am grossing almost \$600 per month which to me is quite nice - especially since I never attended any kind of school after high school. I was lucky enough to obtain a position with the U.S. government, which, even though it is having its problems, still offers much in the way of opportunity for young people. I hope more high school kids look into these programs that are offered by their schools."

"Presently I am no longer working as a secretary. I have gone into the hair designing field because it was my second interest. I do feel that "Vocational Cooperative Work Experience" helped me in many areas. To be more specific it helped me in the following areas. 1) Basic knowledge in finding a job. 2) Skills in short-hand, typing, filing, etc. which can be used for all around purposes. 3) Personality development. 4) Poise. If I can be of any further service, please don't hesitate to write."

"I feel that the Cooperative Work Experience Program is one of the best things ever added to the school system. The program is getting better every year, so that more students are able to take advantage of it. I think it is a great program and I'm very happy I was able to be one of the fortunate ones, to be included in such a wonderful program."

"My answers to the proceeding were very negative, mainly because the program I was taking didn't help me learn any of them. A high school course can't possibly tell a person how life (jobs, etc.) are and have a person decide, from that - what he's going to be. After you've gotten out of school and are fending for yourself - that is when you learn the things your question asked. Experiences in life are what help and shape a person - not a course and high school. However - maybe I just had a teacher who wasn't very good at his job - this also could make the difference in how much a person gains in his courses in school. As it is, I believe the course could use a lot of correcting before it will do what it should do, not just in theory but in actual practice."

"The class I took in high school was called Health Careers. My first job was at St. Vincents Hospital as a nurses aide. My on-the-job training after I was out of school heighten my knowledge the class itself just taught me the basics. I quit the job to go back to school. I enjoyed the work but emotionally I found it hard to take."

"I think the program was terrific. I owe a lot to Health Careers."

"A good portion of my experience was the excellent teacher we had. She helped show and point out these things."

"In high school I was in Child Services, the training I received from that couldn't be put in any other field than children. I was a teachers aid, I was laid off after 8 mos., never went back to nursery schools but my life long dream is to own my own nursery school someday. I think this was all due to getting into a field I was most interested in, I wasn't rushed."

"I enjoyed my 2 two years in Child Services - learned what I liked doing best. I still want to get a degree in teaching someday. I got great satisfaction teaching a small retarded boy to tie his shoes. I think its a great program for any student and if I had to do it over again I'd do it. I got my own personal satisfaction plus learning patience and how to deal with different situations in life. It really helped by having a person who not only taught but was a friend as well."

"The cooperative work experience program is something I feel every student should be enrolled in simply to help the student decide whether or not they like the field they have chosen. But as far as opening more opportunities for the student I don't feel they do. The program I was in didn't offer many different job experiences, it only gave me the very minimum of basics which would be helpful for a job in that field. The training and enlightening I received during the full year I had during the program I could have easily gotten in a 6 week training class. The only way in which the program actually helped me to secure a job was me taking the program. The people who hired me thought the class was something it wasn't and I went to work and learned on my own through trial and error the actual skills I needed to know."

"My experiences, and resultant recommendations, from Health Careers were very valuable, and helpful in my application to the U of O Nursing School - I'm sure they were very influenced. Once in nursing school my past experience gave me an edge on other students who had not had the opportunities that I did."

"In the first part question #23 I put "other" because I got married and moved to Corvallis. I enjoyed working at the hospital that the Health Career class helped put me in. Question #3, first part, I put zero because after I left the hospital to get married I got a job right away at another hospital here in Corvallis. I think it really helped when I told them about my experience I got in my Health Career class."

"I think the work experience program is a very good course for students to get into. I would most certainly recommend it to every student who was interested in working and learning at the same time."

APPENDIX X

ADDITIONAL COMMENTS BY THE SECONDARY 1971
COOPERATIVE WORK EXPERIENCE MALE STUDENTS SURVEYED

"I feel that the work experience did more good than the class. The classroom did nothing to help in my working life. If the work programs would get better jobs, that a person would want for a lifetime occupation, and if the classroom would teach things pertaining to your work, it would be much better. I don't feel that someone who wants to work and only go to school 1/2 a day and they have the credits that they need, then they shouldn't have to take the class. The only reason I took the class is that if I didn't I wouldn't get a work release. If you wish you may use my name."

"Because of my cooperative work experience program I missed three years of my choice of studies. No training by anything else besides on the job. I feel you should let people know what there (sic) giving up for a job. I hope this helps."

"Because of my present occupation (U.S.N.) I cannot take full advantage of my knowledge I received in the cooperative work experience program. But, under the circumstances, I can't 'change occupations' for a while. So some of my answers may seem confusing, but I tried to apply them to the job I held before entering the armed services. But I would recommend the cooperative work experience program to anyone, if for no other reason, for business experience and preparation. I hope this will be of some help to you and the program. My thanks for being concerned about the education and preparation of those to enter the business world."

"The job I had, I had before co-op, and was for spending money. Co-op is a very good program, and helps a lot of kids - it just did not help me that much."

"This program did not help to get my job doing (sic) high school, I had my job before I was on this program. As far as I'm concerned, this program did nothing for me. I keep (sic) my job after high school for a year then applied for a job at ..."

"To (sic) many people used the cooperative work experience program just as a way to get out of going a full day of school."

"I would have got my job today with or without work experience. But it did help me in many ways."

"Presently, I am in the Army, but am planning on college. If I had not joined the Army, I am sure I would have continued at the job I had when I left school. The cooperative work experience program is just beautiful for high school students (who haven't had jobs before, etc.). I sincerely wish I could have been placed in some other occupational field under the work experience program. At the time though, You took what was available. Indirectly, I did acquire some knowledge in my chosen occupation. It's a great program and can actually (sic) be incorporated in other different types of high school classes (behavioral sciences, etc.). It's good experience, and I also think it builds a certain amount of self respect and esteem. I strongly believe in such a course."

"It was the best thing the school had to offer. It helped me to learn how to work and get along with people."