

AN ABSTRACT OF THE THESIS OF

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Title: SURVEY OF COOPERATIVE EDUCATION PROGRAMS IN
SELECTED HIGH SCHOOLS IN OREGON

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Dr. Lester Beals

The purposes of this study were: (1) To attempt to determine how well programs of cooperative education are functioning in meeting the needs of pupils and the community through a survey of those programs in selected high schools in Oregon, and (2) To develop recommendations for improving cooperative education programs in secondary schools based on the findings of this survey.

The survey utilized data secured from responses to questionnaires developed in two pilot runs and administered in twenty Oregon high schools to principals, teacher-coordinators, and students involved in cooperative education programs. Analysis of the responses resulted in the following findings:

1. A majority of the principals evaluated the program as worthwhile, and indicated that they encountered few problems in scheduling, awarding credits, financing, or operating the programs.

2. Responses from coordinators indicated that they were enthusiastic and optimistic about cooperative education. They expressed concern over time allotments for coordinating activities and the availability of work-training stations.

3. Student responses revealed that the great majority of the students approved of the program, and experienced little difficulty with scheduling related class instruction or with grades and credits. They expressed concern with the amount of time a coordinator could devote to on-job supervision, with student selection methods, and with the need for the program to be available for more students.

Recommendations

1. Development of a model cooperative education program for all secondary school students.

2. Re-examination of the total vocational education program in order to develop an articulated program with a well-staffed adequately financed cooperative education program.

3. Suggestions for various methods of housing and operating cooperative education programs.

4. More attention to total staff orientation and involvement with the cooperative education program.

5. Some of the basic components of the teacher intern program techniques of organizing, staffing, and communicating be utilized in the cooperative education program.

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in Selected High Schools in Oregon

by

Charles Edward Smith, Jr.

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Professor of Education
in charge of major

Redacted for Privacy

Dean of School of Education

Redacted for Privacy

Dean of Graduate School

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Seaside Public Schools
Medford Public Schools
Springfield Public Schools
Salem Public Schools
Eugene Public Schools
Marshfield High School
Dallas High School
Tillamook High Schools
Oregon City Public Schools
Clatsop I. E. D. Area Vocational Center
Canby Public Schools
North Bend Public Schools

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Reality for the vocational educator lies in his concept of work.

Gibran writes in The Prophet:

Often have I heard you say, as if speaking in sleep, 'He who works in marble and finds the shape of his own soul in the stone, is nobler than he who ploughs the soil. And he who seizes the rainbow to lay it on a cloth in the likeness of man, is more than he who makes the sandals of our feet.'

But I say, not in sleep but in the over-wakefulness of noontide, that the wind speaks not more sweetly to the giant oaks than to the least of all the blades of grass; And he alone is great who turns the voice of the wind into a song made sweeter by his own loving.

Work is love made visible (22, p. 27-8).

SURVEY OF COOPERATIVE EDUCATION PROGRAMS IN SELECTED HIGH SCHOOLS IN OREGON

CHAPTER I

INTRODUCTION AND STATEMENT OF THE PROBLEM

Much has been said in recent years about the vast need for skilled and semi-skilled workers, as well as the need for training to be available which will allow technically oriented youth to enter the ranks of the skilled or semi-skilled labor force, rather than enter the labor market untrained. The concluding statement of the "President's Committee on Youth Employment" edited by Dr. James B. Conant points out the challenge we as educators face today:

Young people face a world of promise and unprecedented challenge.

They are confident, eager, and anxious to enter and to succeed in the adult world, as were their fathers and grandfathers. We must not allow this venturesome spirit to be dulled by the discovery that jobs do not exist, or that those that do are out of reach.

Young people today must be determined and adaptable if they are to fit into the rapidly changing world of jobs and careers. They must be much better prepared than were their elders. But many thousands of them lack an understanding of the preparation required. At the moment, for them, the rewards lie behind an invisible curtain which, unaided, they cannot lift.

The challenge is not to youth alone, but to all of us. It is a challenge to our determination to conquer a fast-growing new problem with deep roots and many branches, and to our willingness to substitute new ideas for old habits and patterns.

New and stimulating policies for education and economic growth are required. Fresh approaches are needed in the responses of management and labor toward the hiring of youth. Youth itself must adopt new attitudes toward preparation

and employment. Parents, teachers, and counselors can help young people look realistically at school and work opportunities. All of us must share with youth the sense of pride and responsibility that comes from doing well even the simplest job.

Our recommendations highlight what needs to be done to bridge the gap between school and work for millions of maturing boys and girls. To be effective the recommendations should be implemented promptly and vigorously supported on a broad scale in every community, with the closest coordination between responsible agencies.

The challenge is urgent, the task is large, the time is now. The task cannot be delegated and must not be sidestepped. Both public and private groups at every level--local, State, and Federal--must participate wholeheartedly and unselfishly to assure success.

Every citizen has a stake and a share in this responsibility--an obligation to see that today's youth meet tomorrow's destiny well educated, well-trained, and well-equipped, ready and prepared for the world of work (51, p. 14).

It is imperative that educators face this challenge. Pendulums swing in education, just as in any phase of life. We are apt to over-emphasize, to catch a popular fancy, meanwhile neglecting to note where our values may be in need of readjustment. Today, for instance, there is a vast need for skilled and semi-skilled workers. Much has been said but not enough done about this. The pendulum is at the end of the swing; everyone must attend a four year college. Emphasis is given to college and preparation for college, often at the expense of vocational-technical education.

There is, regrettably, a social stigma attached to the person who does not go on to college from high school, and even to the person in high school who expresses a desire not to follow that educational route. John Gardiner said:

The heavy emphasis on college is, of course, very pleasant for those whose abilities and motivations will lead them to complete four years of higher education. Until recently it was considerably less pleasant for those who wished or needed only a year or two beyond high school; but today such youngsters are increasingly well served by junior or community college, two-year technical institutes, and two-year programs in universities. For all other young people, the emphasis on higher education is apt to be a source of considerable strain. All too many are led to believe that in failing to go on to college they have missed the high road of American life (21, p. 14).

Despite the fact that our colleges are crowded to the point that physical facilities are impairing the quality of their educational offerings, still the student enrollment climbs. Many have no idea why they are there. They are uninterested and untalented in the areas of learning which they find there. However, they and their parents have been impressed over and over with the need to go to college in order to make a decent living in the future, and so they plod on, feeling that somehow, if they persevere, they will stumble through the magic door which leads to success and happiness, which, of course, would be lost forever should they fail to succeed.

How unfortunate that our values have been become so confused. As Gardiner says, "Human dignity and worth should be assessed only in terms of those qualities of mind and spirit that are within the reach of every human being" (21, p. 16). The importance of this needs to be understood by the college-bound student as well as the non-college bound. Robert Young made the following statement:

The person who has never engaged in work to produce or provide materials or services cannot fully appreciate his fellow beings, most of whom work in this manner. Talking about the dignity of work is not a suitable substitute for experiencing it (65, p. 27).

When we recognize the importance of experiencing work in the lives of all, why have our public schools done so little about this need?

Experts in education generally agree that vocational education is a necessary part of the comprehensive high school program, therefore it is not a matter of recognizing the need for cooperative education.

According to authorities in the field of vocational education, educators do not possess an awareness of the complex nature of building marketable skills and a sense of worth and purpose in students wishing to enter vocational education (65).

Active participation and understanding on the part of all school personnel is essential if we are to help our students bridge the gap between school and the world of work.

This study will address itself to that aspect of vocational training that seems so complex--Cooperative Education. Cooperative Education programs have been instituted in a number of areas in an effort to bridge the gap between school and work for many students. This study will attempt to survey and evaluate the efficacy of these programs. Great diversity can be found in the organization of these programs; therefore, the study will be concerned with a survey of

some of these programs and an attempt to organize their best features into a pattern which would serve as a guide to school personnel desiring to initiate their own program or to evaluate existing programs. It is a complicated problem, but not an insurmountable one.

The Problem

The purposes of this investigation are: (1) to attempt to determine how programs of Cooperative Education are functioning in meeting the needs of pupils and the community through a survey of student, coordinator, and administrators' opinions regarding operating Cooperative Education programs in selected Oregon Schools, and (2) to develop some recommendations for the improving of Cooperative Education in secondary schools.

Objectives and Activities of the Study

The major objectives and activities of this study are:

- I. To determine by questionnaire and interview the opinions of students, coordinators and teachers, and administrators regarding the value of Cooperative Education programs in selected school districts.
- II. To study programs involving Cooperative Education in home-making, distributive education, office education, agriculture, and trade and industry areas in the State of Oregon and other

states and to survey selected programs to determine how:

- A. the needs of students and employers are determined and community resources are utilized in meeting these needs.
 - B. students are selected for involvement in Cooperative Education programs.
 - C. programs are organized and scheduled.
 - D. credits and academic grades are determined.
 - E. the programs are financed.
- III. To develop a Cooperative Education program synthesized from selected portions of existing programs with suggestions for local adaptations.

Limitations of the Study

The conditions under which the survey is to be carried out do not offer an opportunity for the researcher to exercise control over variables which might affect the outcome of the survey. Therefore, it is necessary to modify the methodology to fit the existing conditions.

The subjectiveness of the responses on the part of the administrators, coordinators, and students imposes a limitation on objective analysis of the responses.

The lack of control for consistent administering of the

questionnaires creates a variable that would tend to preclude positive comparison of results.

Because of economic factors involved and lack of time, it was necessary to limit the number of school districts surveyed in this study.

The validity of the questionnaire for the students was subjected to limited testing and evaluation. The questionnaire was administered to over two hundred students in the Eugene-Springfield area over a period of six months. After study of the questionnaire and results by counselors, teachers, administrators, and students, modifications in the questionnaire were made in order to give it more validity.

Definition of Terms

For the purposes of this study, the following definitions will be used:

1. General Education

Prosser and Quigley say that:

As the name implies, general education should give training in the general background for life and training in the general tools of learning needed to help us learn more about life and about our vocations. . . . General education should prepare us to live more intelligently as citizens and to understand and enjoy life. . . . General education is designed to serve everyone during the period of compulsory school attendance, which in most states now terminates at the age of sixteen and to continue this service through high school and beyond for anyone desiring it and able to profit by it, irrespective of their vocational interests and plans (52, p. 10).

Thus, it would seem that general education can readily be identified.

2. Vocational Education

The specific definition of vocational education that will be most useful and pertinent is that given in the Vocational Act of 1963.

It states:

Vocational or technical training or retraining which is given in schools or classes under public supervision and control, or under contract with a state board or local educational agency, and is conducted as part of a program designed to fit individuals for gainful employment as semi-skilled or skilled workers or technicians in recognized occupations. . . . Excluded are occupations which the U. S. Commissioner of Education determines to be generally considered professional or as requiring a baccalaureate or higher degree (39, p. 143).

Again, it is evident that the objectives of a particular program determine whether or not it is vocational. In the latter case the objectives are that the program fit an individual for gainful employment and that the occupation is not professional in character or requiring a baccalaureate or higher degree.

These definitions, it is believed, should give specificity to the term vocational education.

3. Comparison between General and Vocational Education

Basically, then, it is the objectives of a course or subject taught that determines whether or not it is vocational. If a basic law of electricity is taught to a group of students in a high school physics

class, it would be considered general education. On the other hand, if the same basic law were taught to a group of apprentice electricians, it would be considered vocational in nature. Since the definition of vocational education is very important, it is well to consider those used by the President's panel and also that of the Vocational Education Act of 1963.

In its report to the President of the United States, the panel stated:

Vocational education refers to that part of a student's instruction intended specifically to fit the student for work. . . . In this report the term "vocational education" does not refer to instruction leading directly to a baccalaureate or professional degree. This report uses the term "vocational education" to refer to all formal instruction for both youth and adults, at the high school, post high school, and out of school levels, which prepares individuals for initial entrance into and advancement within an occupation or group of related occupations (61, p. 264).

4. The Cooperative Education Program

True Cooperative Education exists only when it encompasses a systematic plan whereby young people, while still in school, gain realistic employment experience through part-time work and class-related instruction performed under all of the following conditions:

- a. The school adopts a specific plan of operation based on a written outline that shows the respective roles of the school, the student, and the employer.
- b. The school assigns qualified teacher coordinators to direct the program and to coordinate student jobs with the school learnings.

- c. The school makes certain that work done by students is of a useful, worthwhile nature, and that federal, state, and local laws and regulations are followed.
- d. The school, with the help of the employer, evaluates work done by students, awards credit for work successfully accomplished, and enters pertinent facts concerning the student's work on his permanent record (16, p. 5).

The above definition taken from the California State Guide for Vocational Education states in definite terms what Cooperative Education is. DeWitt Hunt, in a summary of Work-Experience Program Characteristics published in 1957, listed general definitions of the characteristics of Work Experience programs:

5. Work Experience Education

- a. The student performs socially useful tasks at a level of proficiency commensurate with his own highest ability.
- b. The work performed is supervised by a qualified school official.
- c. Credit, based on both quantitative and qualitative judgments of the work done, is granted toward high school graduation; it thus becomes part of the student's personnel record.
- d. The work experience for credit must be gained during school released time.
- e. The student may or may not receive remuneration for the work done.
- f. The coordinator or supervisor should meet the students enrolled in the work experience program in a special class in which problems of public relations and job success are considered.
- g. Local, state, and federal labor laws and regulations pertaining to the employment of youth are known and observed.

- h. Care is taken that no exploitation of student labor results.
- i. The controlling purposes of work experience programs may range from guidance and general education to vocational education for a specific occupation (29, p. 8).

A more comprehensive list of definitions of terms used in Cooperative Education is reproduced in Appendix E.

Procedure

To determine how well Cooperative Education programs were felt to be functioning in meeting the needs of pupils and the community the writer felt that a valid approach would be to get responses to questionnaires from three groups within selected secondary schools: high school principals who have the overall responsibility for all programs within their schools; coordinators who have the more direct responsibility for Cooperative Education and work closely with the pupils; and high school seniors whose responses might well be the most significant as they represent the group for whom the Cooperative Education program was designed.

The writer next developed opinion questionnaires to which these three groups would be asked to respond. Following a review of related literature a "check-list" for evaluating the Cooperative Education program was developed.

Construction of the Opinion Questionnaires

Questionnaires were devised to seek responses from the three different groups to as many identical items as possible in order to provide for comparisons of opinion later in the study. Questionnaires for principals and coordinators were somewhat alike except for items concerning financing and awarding credits for Cooperative Education.

Questionnaires for students were constructed to solicit information concerning their introduction to the program and their acceptance and evaluation of the program.

The proposed instruments were discussed with members of the writer's committee, guidance counselors, members of the State Department of Public Instruction and certain revisions made. Some difficulty was encountered in attempting to devise instruments which would secure reactions to common items from all groups, yet provide for a wide range of expected differences existing in various programs of Cooperative Education among approximately twenty schools with broad geographical and enrollment distribution. In anticipation of this difficulty, especially with seniors, the questionnaire was administered in a pilot run to one hundred and fifty pupils with the result that the language was simplified and several items were eliminated as being beyond their reasonable ability or knowledge for responding.

The questionnaires were designed with the first page giving the title of the study, the purpose, the criteria for evaluating each item for rating and the specific instructions for indicating the rating of the provision or conditions described in each item. The questionnaires included four major areas. These instruments as revised and used in this study are reproduced in Appendix A.

Selection of Schools For This Study

The following criteria were used in the selection of schools:

1. Schools should have one or more approved vocational teacher coordinators each assigned to a minimum of two periods of on-the-job supervision daily.
2. Schools should have one or more federally reimbursed vocational education programs to assure vocationally prepared staff participation.
3. Participating schools should be selected in such a manner as to offer as wide a geographical distribution over the state as possible.
4. The number of schools selected to participate in the study should approximate twenty selected on a size-range basis as follows:
 - a. Five schools with an enrollment of 499 pupils or less.
(designated as Type C schools for purposes of this study)

- b. Five schools with an enrollment of 500 to 999 pupils.
(designated as Type B)
- c. Ten schools with an enrollment of 1,000 or more pupils.
(designated as Type A)

A letter, Appendix A, was sent to principals and superintendents of twenty schools which met all the criteria for selection. The letter explained the proposed study and asked the cooperation of the principal, and stated that pending his approval questionnaires were to be mailed to teacher coordinators. Also, it was stated that a vital part of this study would involve a visitation to his school in March or April to explain the instruments to principals and coordinators. One principal indicated he could not participate in the study.

Upon receiving notice from the principals of selected schools approving participation, instructions were mailed to coordinators with copies of the instruments, encouraging their cooperation in the study.

Participation by the Selected Schools

The writer was able to find a qualifying school to replace the one which did not choose to participate. This resulted in participation by 14 Type A schools, 4 Type B schools, and two Type C schools for a total of twenty schools.

School principals and teacher coordinators indicated they would administer the questionnaires under teacher coordinator direction if

they were made available with a set of instructions for administering. After discussing this procedure with his major professor, the researcher developed instructions for administering the questionnaires (Appendix A). The questionnaires with instructions for administering were delivered to the schools.

As the researcher discussed the administration of the questionnaires to students, it was found that four schools did not schedule the administering of these questionnaires as previously agreed. The writer secured the cooperation of the school and left questionnaires to be administered under the direction of the teacher coordinator later in the year.

Treatment of Data

The presentation of the findings from this study is discussed in detail in Chapter III and presented in tabulated form in Appendix B. Conclusions and recommendations drawn from the findings will be presented in Chapter IV.

Summary

This chapter reviews the problem and definitions of Cooperative Education programs and the need for a survey to determine how well the existing programs are functioning in meeting the needs of pupils and the community. The writer has stated the problem, objectives,

achievements and purposes of the study, listed the limitations, defined the terms and explained the procedure followed in conducting this investigation.

The following chapter is a review of the literature related to this study.

CHAPTER II

REVIEW OF RELATED LITERATURE

The literature of the vocational education field has been plentiful in certain directions and scarce in others. Much has been written regarding the need for vocational education. There are many writings concerned with the kind and quantity of activities which should be offered in vocational education programs and they appear to be well defined. Also well developed are the duties and responsibilities of those involved in providing instructional services and operation of programs. A small amount of this literature has been concerned with the organization and operation of Cooperative Education programs, but more often it is concerned with vocational education in general and the evaluation of vocational education programs. There appears to be a paucity of research in the qualitative appraisal of current Cooperative Education practices involving those persons most directly concerned in the operation of the program--school administrators, teacher coordinators and pupils.

In this chapter the review of the literature pertaining to Cooperative Education is presented in the following order: (1) a survey of historical perspective of Cooperative Education and (2) literature concerned exclusively with Cooperative Education.

Cooperative Education has always been interwoven with vocational education and it is difficult to understand the development of cooperative education without some perspective of the history of vocational education.

In order to spare the experienced vocational educator the chore of reviewing a history of vocational education, a section dealing with the history of vocational education and a summary of current literature in the field of vocational education has been included in the Appendix. Readers interested in these subjects are referred to Appendix F.

Historical Perspective of Cooperative Education

There is nothing new in the concept of cooperative education as an educative force. The use of work and study as a means of teaching vocational skills is discussed in early Hebrew literature--

The Talmud states: As it is your duty to teach your son the law, teach him a trade

He who does not have his son taught a trade prepares him to be a robber. . . . Disobedience to this ordinance exposes one to just contempt, for thereby the social conditions of all are endangered (60, p. 48).

It was customary for the son to learn the laws of his religion from the rabbis in the morning, and the skills and methods of his father's trade or vocation in the afternoon. The resemblance of the ancient Jewish method and the modern plan of part school, part work for students in many forms of cooperative education programs is most striking.

Cooperative Education as a method of learning is universal and is a part of the educational system of all in the world. Ivins and Runge list some beginnings in the structure of Cooperative Education:

Early cultures used work experience techniques to teach the basic of education, preservation of life and as the tribe and culture advanced it shifted emphasis from general learning to mastery of specific skills and crafts.

One of the inherent factors in any work experience program is performance, and this immediately is associated with one of the older procedures in education apprenticeship (32, p. 27).

Early references to apprenticeship appear in the Babylonian Code of Hammurabi of 2500 B. C. and made it clear that for an artisan to adopt a boy as his son and then teach him his art was not uncommon. The father-and-son characteristic of the relationship was important, for it was again emphasized in the early Jewish law (32, p. 27).

The Hindus also had the system of apprenticeship. May has shown, however, that a large part of their motive was to meet the religious requirement that certain funeral ceremonies be carried out by a son (32).

Apprenticeship programs were modified during the middle ages.

The father-son emphasis was replaced by purely economic factions. Apprenticeship became the chief means of education for the lower classes.

In the New England colonies masters were bound to teach apprentices to read and write, but in practice this procedure was not followed by all masters.

The story of Franklin's life presents an interesting picture of the colonial apprenticeship program.

Franklin himself did not attend school, however, the bulk of American artisans and skilled workers, or at least that portion of them who were literate, learned to read and write more often in the dame or other village school, than they did from the masters to whom they had been apprenticed. The common school of the masses was on its way, as was the Industrial Revolution, and with the two came the decline of apprenticeship as a general educational institution (32, p. 29).

By 1900, apprenticeship could be found only in a new form in the labor unions and in labor training plans of industry. The old concept with its paternalistic and general educational characteristic was gone, replaced by an entirely new pragmatic approach to vocational preparation.

The revised interest in Cooperative Education in schools, particularly in comprehensive secondary schools, seems to indicate a return to portions of the old apprenticeship system, i. e., the combining of on-the-job training of work and education programs:

Early Manual Labor Schools, a vital part of early America, included work as a part of education for three specific reasons: (1) preserving the health of the students; (2) enabling many young men to secure an education who could not otherwise do so on account of the cost; and (3) offering educational values inherent in the work activity (32, p. 28).

Colleges and agricultural schools include cooperative education for the purpose of realizing the second and third of these objectives.

The utilization of earlier work-study programs to develop the cooperative plan of education of Herman Schneider in 1906 introduced a new reason for the incorporation of work in the educative process. This reason was that many items of technical knowledge and personal growth can be secured most economically through actual-on-the-job employment (19, p. 6).

By the early fifties, Schneider's plan of Cooperative Work Experience Education was adopted by many colleges and thousands of public high schools throughout the nation. Starting in the Cincinnati Public Schools in 1907, Schneider developed programs for public high schools in Fitchburg, Massachusetts High School in 1908, and the York, Pa. High School in 1911. Cooperative Education Programs were installed in New York City High Schools in 1915. The Fitchburg High School program is considered to be the first complete high school program of true Cooperative Education to be established in the United States (19, p. 8).

The Fitchburg program was organized after several Fitchburg manufacturers heard Professor Schneider explain the college engineering cooperative education plan at a meeting in New York City. Upon returning to Fitchburg, they decided to promote the organization of such a plan for high school boys in their home city. The program was initiated in 1908. Students alternated one week in school with one week at work. On Saturday morning the boy who had been at school went to the shop in order to be ready to take over the working student's job the next Monday morning.

By 1928, 5,682 pupils were enrolled in work experience education programs in seventy-eight cities scattered widely over the entire nation (29, p. 28).

The depression of 1930 gave impetus to Cooperative Education. Several million youths were out of school and unemployed. Few jobs were available and such as were available required both advanced educational preparations and job experiences. The first of the Federal youth programs was the Civilian Conservation Corps, established in 1933, ". . . for the relief of unemployment through the performance of useful public work, and for other purposes" (32, p. 27).

The Student Aid Program for students enrolled in high schools and colleges was introduced. This program provides funds to high schools, colleges, and universities to be used in paying high school and college students for performing useful work. Students selected for these jobs were those who were financially unable to continue their formal education.

Another Cooperative Education Program was begun in 1935, by the National Youth Administration. Originally it was organized for

the purpose of providing ". . . relief, work relief, and employment" (32, p. 28). Congress approved an authorization in 1938 for NYA funds to be used ". . . to provide part-time work and training to needy young people who are no longer in regular attendance at school and who have been unable to obtain employment" (32, p. 29). Resident work centers were used as one process through which the training program was accomplished.

All over the nation, work projects in building construction, road building, forestry conservation, soil conservation, biological surveys, health service, and hundreds of other work situations were used as the vehicles for an educational program. Through these programs the attention of the general public and of school people was brought to a focus on the educational possibilities of a youth program based on work projects. Attention was sharply focused on the need for work experience opportunities for youth on a wider scale and with better planning than had been available in earlier secondary schools. The results were that school administrators adopted the principle of developing a high school curriculum sufficiently broad to meet the needs of all youth in the age groups served. They also recognized that the Cooperative Education process should become a fundamental component of the secondary school program (32).

The beginning of World War II, and the need to increase our national production to support a program of preparedness resulted in

employment opportunities for youth becoming plentiful and attractive. Many high school students were dropping out of school as soon as the legal school-leaving age was reached. Some were dissatisfied with the school curriculum and others were lured off by easy jobs and large salaries. This exodus caused authorities to focus their attention on Cooperative Education programs as a means of providing youth an opportunity to combine work and work education (29).

Part-time school and work programs had been in operation in many schools under the Smith-Hughes and later federal vocational education provisions. As the new work experience programs were established, they could not be promulgated as vocational programs under the provisions of the Smith-Hughes Act. As administrators, principals, teachers, and guidance workers gained experience with the programs they saw the work-study experience as a resource for the adjustment of individual students, and began to recognize in the new programs many general educational advantages in addition to vocational preparation (29).

Congress, recognizing the importance of the public schools in a war emergency, approved a series of emergency acts beginning with Public Law 668 and Public Law 812 of the 66th Congress and a subsequent series of annual acts up to Public Law 124 of the 79th Congress. These were known as the Vocational Training for War Production Workers' Acts. Funds were granted to State Boards for

vocational education to cover the total cost of training for production workers to work in defense industries through the facilities of the public schools (32).

As a result of the World War II experiences, Cooperative Education programs were reviewed in public high schools throughout the nation. Many studies were conducted in the late forties and early fifties concerning the size, organization, and evaluation of Cooperative Education in public high schools. Many interesting and pertinent facts were added to educational knowledge concerning Cooperative Education.

A study by Schmaezle indicated that the number of Cooperative Education students in San Francisco, California High Schools dropped from over 1,000 students in 1945, to less than 400 by 1948 (53, p. 168).

A corresponding drop in enrollment was reported by Anderson in the Los Angeles Public School system (15, p. 100).

The period from 1950 to 1953, showed continued decline in the enrollment of Cooperative Education students (38, p. 11).

A doctoral dissertation by Marie Martin in 1954 revealed a significant increase in enrollment in this type of education (38, p. 16).

Subsequent studies in Detroit and New York reported the same basic pattern, i. e. , a slow decrease in enrollment from 1945 to early 1953 and a definite, although rather slow growth in enrollment

in cooperative education in the period from 1953 to 1963.

The period from 1963 to the present has seen a remarkable expansion of all vocational education programs, including Cooperative Education.

Current reports from the Oregon State Department of Public Instruction, Division of Community Colleges and Vocational Education indicate that enrollment in cooperative education has grown from 810 students and 29 instructors in 1963-64 to 1,445 students and 42 instructors in 1967-68 (43).

The brief survey of the history of Vocational Education and Cooperative Education is presented in the hopes that it will provide a framework for understanding the current literature concerning Cooperative Education.

Survey of Literature Concerned Exclusively
with Cooperative Education

Work Experience

"Work Experience" is the term most commonly used to describe work during school hours as a part of the regular school program. What this phrase "work experience" means to several writers is shown in these quoted definitions.

Work experience is that experience which students gain through participating in the production of needed goods or service in a normal situation in industry, business, in the community at large, or in school, under the direction of the school (32, p. 4).

. . . work experience consists of a series of experiences in which needed goods or services are produced (43, p. 2).

In general, "work experience" applies to a task which is not concerned (necessarily) with preparation for a specific skilled or semi-skilled job which a young person may hope to follow as a lifework; rather it is concerned with developing skills, habits, and attitudes which are of value, no matter what occupation one may follow (32, p. 4).

School work program is an all-inclusive term applied to a number of vocational and/or general education arrangements designed to give youth employment experiences while still in school. Any work-for-pay experience which is definitely planned and properly approved, coordinated with other school subjects and supervised by some assigned person on the school staff as a part of the school's curricular offering is a part of such a program. Credit is usually, but not always given (32, p. 4).

Types of Cooperative Education Programs

Cooperative Education programs may be classified by their sponsorship, e. g. federal, state, county, city, private or church; in terms of their relationship to other agencies--school-related, court-related, reformatory-related, or church-related; with respect to function--vocational training, rehabilitation of the handicapped, rehabilitation of delinquents, delinquency prevention, citizenship training or recreational; in accordance with their organizational design--residential, year-round, summer camp; or by the type of

work and remuneration provided. The difficulty of classification is increased by the wide variety yet small number of programs in existence. In addition, a given program of Cooperative Education might appropriately be included in several categories. Perhaps one of the most valid ways to classify Cooperative Education programs is according to function. Stiles describes the following types: remediation therapy as usually found in institutions of correction for the purposes of building character traits as well as mastering work skills; adoptive programs for the handicapped, particularly the mentally retarded, which aim specifically at vocational placement; vocational preparation in distributive and industrial education to prepare youth for employment; character and citizenship development to give youth an opportunity to engage in socially useful work; community service and recreation which operate chiefly through service clubs and summer camps (57, p. 16).

Mason and Haines summarize Cooperative Education into five basic types --

A. For General Education Purposes

1. Work observation programs
2. General work experience programs

B. For Occupational Education Purposes

1. Work-study programs
2. Internships
3. Cooperative education programs (39, p. 47).

Mason and Haines developed the following chart (see Table 1) to

Table 1. Five Basic Types of School Programs Using the World of Work as an Educational Experience.^a

A. For General Education Purposes		B. For Occupational and Professional Education	
(1) Work Observation	(2) General Work Experience	(1) Work-Study and (2) Internships	(3) Cooperative Education
Student observes work, does not perform tasks except to understand them. Unpaid, usually few weeks in length at most. May be tied in with a class in which occupational information is discussed.	Student performs tasks of actual job. May or may not be paid. Typically engaged in for general education values, including exploratory. Usually one semester or less. Limited school supervision; usually no related class.	Student performs in approved job situation. Usually paid and given credit. In school instruction usually before work period and seldom tied in directly with job experience. Typically one semester or more. "Internship" is term used for collegiate experiences.	Occupational goals based on student's career objective. The work situation is an occupational laboratory for in classroom instruction in school. Pay and credit. Consistent school supervision. Typically at least one year.

^aCharts used with permission of author.

further explain this grouping.

Mason and Haines go on to point out that the primary purpose of the chart is to illustrate the types and characteristics of each. Note that:

(1) each type uses a work situation as the source of learning experiences, (2) each program is part of the institution's curriculum, regardless of whether the experience is during school hours or not, (3) each involves school approval of the job and at least minimal school supervision, (4) each includes an observance of local, state and federal labor laws, (5) each gives school credit either separately or as part of the credit for another course. However, further analysis of the table will reveal that the major differences between programs occur first in purpose and secondly in their organizational and instructional characteristics, such as the length and depth of the experience, the relationship of the training firm to the student's career goal, the amount and type of supervision, and provision for instruction in school related to the experience (39, p. 49).

A number of writers have prepared analysis comparing or demonstrating the differences between cooperative and work experience education.

Peter G. Haines developed the following analysis:²

Situation A	Situation B
The school is concerned with developing outcomes suitable for <u>all</u> students:	The school is concerned with developing outcomes for those who are preparing for the world of work:
1. Occupational exploration and personality development as facets of the education of the whole child.	1. Learnings which every worker needs to know.

²Tables and charts used with permission of author.

2. Common learnings--what all workers need to know--a part of general education.

If these outcomes are to be learned through a job situation, then the method is characterized as:
WORK EXPERIENCE FOR GENERAL EDUCATION

2. Knowledges, abilities and attitudes which only the worker in a given occupational field needs to know.

If these outcomes are to be learned through a job situation and correlated study in school, then the method is:
COOPERATIVE VOCATIONAL EDUCATION (39, p. 50).

In addition, the following differences typically occur between the programs according to Haines (39, p. 51).

GENERAL WORK EXPERIENCE

1. Usually has as its primary goal the improvement of general education, the gaining of exploratory occupational experiences, or the holding of the student in school.
2. Based on student's general education needs or need for employment to remain in school.
3. Student hired as a "producing worker" or as an observer.
4. Often utilizes any available part-time job.
5. Usually relies on the job to provide trainee experiences; the in school class (not always used is not usually directly related to the job.

COOPERATIVE OCCUPATIONAL EDUCATION

1. Has as its primary goal the development of occupational competency.
2. Based on the student's stated career objectives.
3. Student hired as a "learning worker."
4. Places the trainee in a job commensurate with his ability and his career objectives.
5. Provides classroom activities directly related to job activities and trainee's occupational goal.
6. Provides the trainee with a variety of job experiences, often involving rotation through different departments of the firm.

6. Job rotation is usually co-incident rather than part of a planned program.

Organization and Administration of Cooperative Education Programs

Cooperative Education is an integral part of the vocational education program. Therefore, at the higher levels, the organization and administration of the Cooperative Education programs will be only a facet of the total organization of the vocational program.

State Level

Most of the fifty states have developed a state plan for Cooperative Education and a survey of twenty-three of these reveals a great degree of similarity. These plans provide an administrative structure usually consisting of a state board and a state advisory council and recommendations of the state administrative officer is empowered to hire a director of vocational education charged with planning and implementing an effective supervisory program for Cooperative Education. State supervisors are employed for the various occupational areas and they maintain adequate staffs to ensure effective planning and implementing of a state-wide system of Cooperative education.

States are required by federal law to designate a state official

to act as custodian of all federal funds and a state official to authorize all expenditures of state and federal funds. State plans provide formulas for distribution of funds, set qualifications for professional personnel, and provide assistance in developing programs of occupational education.

State boards of vocational education are charged with developing adequate teacher training programs, establishing teacher certification regulations, conducting research in the area of occupational education, setting standards and requirements and evaluating occupational education programs. State boards also have the authority to set up area centers for occupational education.

Most states have supplemented their official state plans with guides for local school personnel to use in planning and operating Cooperative Education programs.

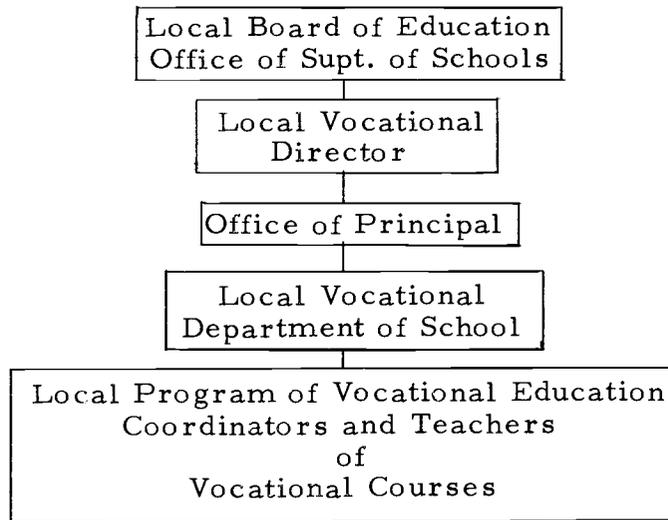
Local District Level

State plans offer guidelines for Administration and Organization of Vocational Education. Oregon's guidelines are typical of the guides developed by most of the fifty states.

Oregon's Plan for Vocational Education suggests local districts should establish a pattern of organization for vocational education.

A good example is the following table: (39, p. 137)

Table 2. Table of organization for vocational education at the district level. ^a



^a Author of this study recognizes this is not a typical flow chart for Oregon School Districts, but is a recognized chart more typical of national practices.

Role of Board of Education:

Oregon Law establishes the duties of school boards. ORS 332-

075 states:

332.075 Powers of board. The district school board of any school district may:

(1) Subject to applicable provisions of law, establish and maintain kindergartens, elementary schools, high schools, manual training schools, vocational schools, schools of trades, adult education programs, evening schools and schools for deaf and eligible mentally retarded children or, subject to ORS chapters 336 and 343, maintain other services needed to meet individual differences not otherwise met by special programs (46, p. 73).

The Board, in order to meet its responsibilities, appoints an executive officer, the superintendent, to organize and implement a program of instruction to meet the needs of the students.

The Superintendent's role in vocational education is that of the chief educational officer of the school district and should be a part of the vocational education planning team. The District Policy Handbook, School District #19, Springfield, Oregon, presents a concise summary of the role of the Superintendent in the total educational program including work experience education program:

The Superintendent acting as the executive officer of the governing board, coordinates, supervises, and directs the total program of the school system; he asserts leadership and guidance; the development, organization and implementation of all activities; he is also charged with advising and assisting the board in the formulation of policies (56, p. 12).

The role of the Director of Vocational Education is well defined in a concise description of the duties of the local director in the Oregon State Plan for Vocational Education:

He is responsible for the overall planning, supervision, and coordination of the total vocational education program of the educational agency. He must be familiar with the various fields of vocational education and assist each to render maximum service to the community. He recommends the appointment of all professional members of the local staff and directs program development (48, p. 15).

Larger districts often employ assistant directors to assist the Director and School Administrators in administering the local program. Often an assistant director will be assigned responsibility for each of the major areas, i. e. - Assistant Director for Office Education, Assistant Director for Vocational Agriculture, etc. Many

descriptions of the role and duties of the Assistant Director are available in the many state plans and guides. Oregon's plan has a very good concise description of the role of the Assistant Director,

Performs the functions assigned to him by the director, such as program development and the coordination of the various vocational education program fields (48, p. 14).

In the organizational table the role of the school principal was mentioned. The description of the role of the school principal could be divided into two major areas--the mechanical or organizational functions of the principal and the role of developing a favorable climate or attitude toward work experience education.

The general function or organizational responsibilities of the principal is presented in the following excerpt from the Policy Handbook, Springfield Public Schools,

The school principal is the chief administrative officer of the school and is charged with the development and evaluation of the school curriculum. He is also responsible for enforcing all board policies and recommendations.

The principal shall establish and maintain communication with the staff, students and public and utilization of all community resources to enrich the learning program (56, p. 12).

The role of the principal in establishing a favorable climate and attitude for work experience programs is discussed in an article written by Professor Melvin Barlow, Director of Division of Vocational Education, University of California, in an article in the

Bulletin N. A. S. S. P. 1965. Dr. Barlow suggests that educators, particularly principals, need to improve their general knowledge and understanding of cooperative education and develop a clear picture of what the vocational education program is and where it fits in a comprehensive educational program. Dr. Barlow advocates that vocational education and cooperative education programs ought to be the primary goal of education and all teachers in the school should be contributing to the occupational preparation of youth. Dr. Barlow writes that:

The school principal and his staff must look objectively at vocational education, must study the purposes and program of vocational education, and must check upon their attitudes about vocational education (7, p. 12).

Many authors in the field of developing cooperative education curricula stress the point of attitude of the school administrators as a vital factor in developing any effective programs. A suggested sequence of activities for school administrators as presented in the New York Manual for Cooperative Education suggests:

1. Carefully examine his own attitude toward vocational and cooperative education as a vital part of the comprehensive high school curricula.
2. Become acquainted with current thinking in philosophy and organization of vocational education programs.
3. Consult with vocational staff members as consultants regarding procedures and activities to be undertaken when considering cooperative education curricula.
4. Use the advisory committees as consultants to alert the administration and staff regarding the occupational structure, and requirements, of the community, as

well as assisting staff in developing curricula.

5. Acquaint all administration and staff regarding any unique scheduling, grading, and awarding credit procedures usually employed in vocational educational programs.
6. Fully investigate the concept: Our community can be used as a work experience laboratory.
7. Organize faculty study groups to help establish total vocational curricula (41, p. 14).

The total staff involvement in cooperative educational curricula under the leadership of an informed enthusiastic administration is the most important factor in developing a cooperative education. The real responsibility for organizing and implementing the program resides with the coordinator and the instructor or as in many cases the instructor-coordinator. Mason and Haines present a list of the responsibilities of the Instructor-Coordinator in organizing and implementing the program, which include the following activities:

He should conduct surveys of the school and communities, develop and maintain a public relations and promotion program. He should provide both leadership and be actively engaged in planning all vocational educational programming in the school and specifically be concerned with selection of work training stations, recruiting selection and placement of students and development of related classroom instruction (39, p. 123).

The Instructor-Coordinator should be the prime mover in the evaluation of the work training stations, the progress of students, follow up of students, and effectiveness of the total program (39, p. 124).

Mason and Haines indicate that the characteristics of a

successful teacher-Coordinator usually include the ability to be a good teacher with demonstrated ability to lead young people. He should have an effective knowledge of teaching techniques and know how learning takes place. He should possess an extensive knowledge about the world of work--and have considerable first hand experience with occupational education requirements, and, finally, he needs adequate academic preparation and training for the related classroom instruction and designing instructional facilities for vocational education. They also recommend the Instructor-Coordinator have the physical stamina for the job and possess the ability to coordinate (39).

Mason and Haines present a long list of coordinating activities which include:

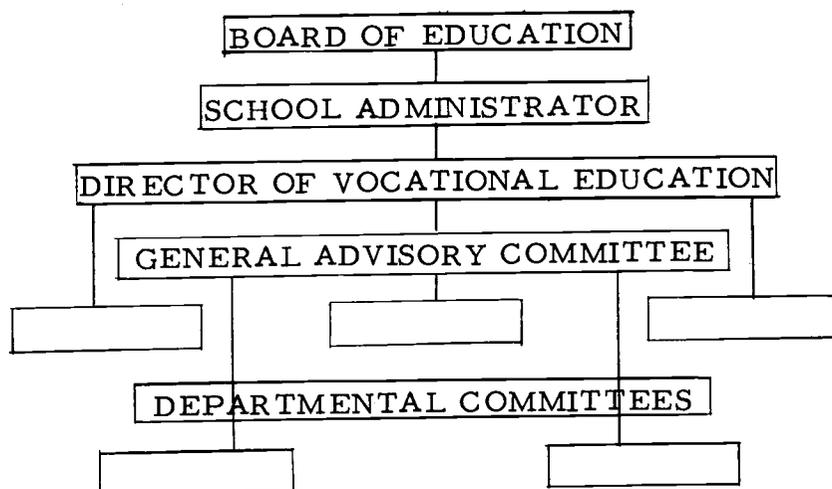
Organization, promotion, and development of the program. Selection, recruitment placement of students, on job supervision and subsequent coordinator, employer, student conferences. The coordinator must coordinate the on the job experiences with the related classroom instruction. He must help in the coordination of the work experience program with the total educational program of the school (39, p. 125).

Mason and Haines also mention the need for the coordinator to serve in an active capacity in evaluative and guidance functions of the school (39).

All the state plans studied indicate the formation of local advisory councils was a vital and necessary part of planning. The following guide lines were issued in a duplicated bulletin by State

Department of Education, Division of Vocational Education, Salem,
Oregon, October 1964.

Table 3. Table of organization lay advisory councils.^a



^aTable copied from an unpublished bulletin. Division of Community Colleges and Vocational Education. State Department of Public Instruction, Salem, Oregon, 1965.

The State Department Bulletin describes the advisory committee as:

The advisory committee is a group of representative lay citizens from the community who possess current and substantial knowledge of the needs for vocational education. When established and organized on a sound basis a committee performs an important service to the school and community. . . .

They provide advice not easily obtainable elsewhere, have important public relations potential, and offer external support of policies (49, p. 2).

The Bulletin suggests school districts organize the following

committees:

1. General committees are set up to advise on the entire educational program or an entire vocational program. They are usually a "long-range" committee which acts as a continuing constructive advisor to a broad program. They may cooperate with smaller departmental committees which deal with selected phases of the program.
2. Departmental advisory committees are organized to serve a single department, with selection of members who have more experience directly related to special phases of the program.
3. Craft Committees in the industrial education field are appointed to serve a single course of study within a department. They assist in keeping the school up to date on current practices within a particular occupation.
4. Short-term committees are organized for a specific task within the school district, such as: assisting and executing a bond campaign or dealing with such matters as curriculum (49, p. 3).

Most of the states publish curriculum guides for administrators and teachers at the local district level to use in planning occupational and cooperative work education programs. Curriculum recommendations from some of the outstanding publications are mentioned in Chapter IV.

Budgeting for Cooperative Education Programs does involve some special considerations and requires thought and study by school administrators. The California Guide for Cooperative Work Experience Programs published by State Department of Public Instruction, Sacramento, California, suggests that although salaries

for supervision and coordination make up the major items of expense, provision should be made for transportation costs involved in job supervision. Clerical assistance is needed and should be allowed along with office supplies, postage, and telephone service (16).

The California Guide presents the following recommendation for coordinator student ratio:

Studies conducted in California in 1954-55, indicate that 75-100 students are the maximum load that a co-ordinator can handle satisfactorily (16, p. 54).

Oregon State Department of Public Instruction publication, "Co-op Program the Common Bond," states,

Assignments of coordinators should not exceed on a full time basis, 45 to 60 students (43, p. 11).

The school administrator with the advice and assistance of the vocational staff should be aware of the specific and unique financial or budgeting needs of the work experience program including adequate supervision time for coordination, need for clerical assistance and office operating expenses. Adequate budgetary provision is vital to the success of the Cooperative Education Programs (43).

The awarding of credits for Cooperative Education Programs is not a major problem in the operation of the program. Many of the State Guides surveyed present brief guide lines regarding these factors. The Texas Guide for Work Experience, a guide published by Texas Education Agency, Austin, Texas, suggests:

When a work experience education program becomes an intergral part of the curriculum, determinations must be made concerning the awarding of school credit, as is the case with any other school subject. Such determinations include: (1) the amount of credit that students may earn per year for work experience education; (2) the total credits that may be counted for graduation; and (3) the verified hours of employment that must be completed for each unit of credit (58, p. 10).

The Cooperative Work Experience manual published by the University of the State of New York, Albany, New York, points out,

Cooperative student workers should understand the importance of satisfactorily performing regular school work as well as doing a good job in part-time employment. Prevailing practice is to grant one unit of credit toward graduation for 600 hours of supervised work experience completed during the school year. This would include supervised summertime and vacation employment. Consequently, 300 hours of work experience accumulated during the school year would merit one-half unit. This is not generally recommended that students who accumulate more than 600 hours of work experience be granted more than one full unit of credit in any one school year. In addition, it is not recommended that work experience in excess of 600 hours be carried over into another school year.

Students should be encouraged to work an average of fifteen hours a week when school is in session. Additional hours can be accumulated during holidays and vacations (41, p. 24).

A study of recommendations from guidelines published by the State of Oregon states,

The amount of credit varies depending upon the policy of the school district, the type of work experience education, and the degree to which the program is tied in with a class of related instruction. A generally accepted practice is to allow one credit for the related class based upon an average attendance of five hours per week and to give one or more credits for the on-the-job experience based on a careful assessment of the scope of learning experiences provided.

In the granting of school credit it should be noted that hours worked as part of a Cooperative Education program beyond the regular school day are considered to be equivalent to hours of work during the school day.

Care should be taken to assure that students are not penalized or discouraged from enrolling in such programs, a situation which could arise if appropriate credit is not given (43, p. 12).

Scheduling of students for Cooperative Education programs seems to present a few problems and very little detailed information is available regarding scheduling students. Most school systems seem to follow general patterns of half day classes and half day for on-job experience.

The publication, Co-op the Common Bond, suggests,

The scheduling of classes of related instruction and work hours of the student should remain flexible allowing for the type of program, the needs of the students enrolled in it, the organization of the school schedule, and the demands of the employer. Students in cooperative education should on an average attend classes of related instruction at least five periods a week throughout the semester. All or part of this may be given by special vocational instructors in their regular vocational classes (43, p. 10).

The California State Guide for Cooperative Education suggests that students may be scheduled for Cooperative Education programs with classes in the morning, on job training in the afternoon, or on the job training in the morning and classes in the afternoon, and suggests that scheduling of working hours should be kept flexible (16).

Evaluation is a major part of the Cooperative Education program and usually takes two forms--informal, and formal. The

California State Guide, in describing Informal Evaluation states that as a program progresses, evaluation takes place continually on an informal basis. The coordinator constantly receives from the employer, the student, the parents, and school personnel their informal evaluation of the program (16).

The same publication in discussing formal evaluation of a program states that this usually takes the form of questionnaires completed by employers and students currently enrolled in a program, by students who have completed the program and are permanently employed, by students who have completed the program and are still in school, and by students who have dropped out of the program without completing it. Some school districts have found it desirable to obtain an evaluation of the program from parents and from staff members of the school in which the program operates (16).

Satisfactory evaluation can be accomplished only when all facets of a program are considered. Any evaluation of a Cooperative Education should include a clear look at the aims and objectives of the program. Is the program flexible inasmuch as aims, objectives and philosophy can be revised as a result of evaluative finding?

The activities of the coordinator need to be examined in regard to

adequacy of time schedule and effective use of time available in providing adequate on-job supervision, counseling with enrollees, meeting with employers,

record keeping, and coordinating effective public relations activities within the community (16).

The qualities of the coordinator should be evaluated

in regard to his demonstrated ability to exercise proper leadership, develop support with employers, school staff, and students (16).

A periodic examination of the work training stations should be considered a necessity in the operation of a good work experience program, especially in the areas of: employers' awareness of their role as members of the education team in the operation of the program; the adequacy of the work training station to provide the desired experiences deemed necessary to meet the objectives of the enrollee; assurance that all legal requirements and regulations are met and followed (43).

The class related instruction program should be subject to a continuing evaluation of activities to determine that the class-related instruction programs:

are carefully planned to include the variety of activities, teaching techniques, and instructional media needed to meet the students objectives.

give attention and consideration to individual student problems.

allow adequate time and attention for record keeping.

involve students in the evaluative process (16, p. 57).

The effective use of the advisory committee should be a prime concern to any evaluative process. Advisory committees can and

should be used regularly in advising the coordinator and school staff in curriculum instruction, locating work training stations and counseling suggestions for students. The evaluation of any work experience program should include the activities of the lay advisory committee (41, p . 47).

The communication between school, industry and the community should be given special attention by the personnel involved in program evaluation (41, p. 33).

Effective record keeping and student follow up activities are important facets of a successful program and should be considered in the evaluative process (41, p. 33).

Planning Class Related Instruction

In order that students may get the greatest benefit from their work experience, it must be supplemented by correlated classroom instruction. This usually takes place while they are working on the job and is of two types: (1) work orientation classes which instruct on the meaning of work and discuss general problems related to employment; and (2) classes in specific job skills needed (16, p. 16).

In planning content of these classes, specific objectives should attempt to give students an understanding of business procedures and practices and acquaint them with the various types of jobs in their field, train them to do a better job and take advantage of

opportunities for advancement as well as improve their understanding of problems mutual to employers and employees (32, p. 353-354).

Mason and Haines divide course content into three basic areas: (1) general occupational competencies, (2) specific occupational competencies, and (3) specific job competencies. In stressing the importance of observing student needs in determining the distribution of classroom time allotted to each area they say, "The wise teacher-coordinator recognizes that to educate an individual only generally for occupations is not to educate him at all, while to educate him specifically for one job title is only to assure him immediate employment and to ensure his need for retraining in the future" (39, p. 234).

Mason and Haines reproduce the following outline of the content of general related instruction abstracted from Manual for Occupational Relations, General Related Study (Minneapolis: University of Minnesota) (see Table 4).

Probably the most important step in establishing a work experience program is the selection of the right coordinator or coordinators to operate it. The individual who operates a successful program must be well trained, active, and aggressive. There are various sources from which these people may be obtained. Sometimes a local business person is available who would like to go into teaching and who can qualify with only a few courses in professional education. Sometimes there are teachers already working in other

Table 4. Some Units of Instruction for the Related Class Required of Students Enrolled in the General Work Experience Education Program.^a

1. Orientation of the Program
 - a. Understanding responsibilities to school, employer, and fellow workers
 - b. Knowing purposes of the program and becoming oriented to rules and policies
 2. Learning to Do My Present Job Well (analysis of job)
 3. Personality Development and Adjustment
 4. Employee-Employer Relationships
 5. Co-worker Relationships
 6. Money Management Problems of the Worker
 7. Income and Other Taxes Paid by Employees
 8. Essentials of Social Security
 9. Labor-Management Relations
 10. Insurance for Personal Living
 11. Planning for Progress on the Job
 12. Improving Dress and Grooming
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^aUsed with permission of the author.

areas who are interested in this type of work and can easily learn enough in a summer session to start a small program. Some teacher-training institutions giving courses in the operation of work experience programs will have trained people available. Finally, persons who have already operated successful programs in other localities may wish to move to a new area (32, p. 172-173).

In addition to having the necessary professional qualifications, the coordinator must have the type of personality which will allow him to deal successfully with many types of people including employers in the business world and students and fellow workers in the schools. He must also be a person of good judgment since many possibilities will arise in a work-experience situation which cannot be easily decided by clear cut rules (43).

Since Cooperative Education programs are dependent upon the cooperation of many different groups, it is essential that both the beginning and the on-going program be thoroughly explained and "sold" to many people. Particularly important are the employers, students, parents, and faculty members. Various ways of reaching them, such as talks and speeches, discussion groups and printed materials are all helpful, but most important of all is the personal interview. Many times, the program will not be sold on the first contact, but persistent persuasion is essential, and as a program begins to prove its worth by successful placing of good trainees,

more parents, students, and employers will be willing to take part, and faculty members will be more cooperative (32, p. 228-229).

Practices in selection of students vary greatly. Some schools enroll anyone who wishes to participate until the facilities are filled. Other schools have increasingly selective enrollment including the extreme where no student may enroll who does not possess a long list of qualifications. Somewhere between these extremes lies the most common practice. Cooperative education programs are not a "dumping ground" for all who fail to fit into other programs in the school, nor should they eliminate those who possess basic qualifications and ability to do the work. A suggested list of criteria for admitting students to the program could include: Age of sixteen years, interest in the occupational area, job opportunities available, training station requirements, interest in the whole training program, health to withstand the additional strain, whether or not the student will be going on to advanced schooling after high school, past record, required school course conflicts, grade level in school, personal characteristics, need for a part-time job and whether or not they already have one, and permission of parents and school administrators (32, p. 274-278).

Approval and adoption of a training station should be based on mutual understanding and agreements among the employer, the school administration, the coordinator, and the prospective student-learner. Everyone concerned must understand that the training station is to serve

primarily as a training medium rather than merely as an opportunity for remunerative employment for the student or for an employer to obtain part-time help. Experience gained at the training station should therefore be expected to contribute significantly to the development of knowledges, skills, and attitudes which are needed in the occupation for which the individual's training program is designed and which further the student's career objective (39, p. 183-184).

In selecting the best possible training stations for the students, the coordinator should use some criteria such as the following on which to base his judgment. Does the employer show sufficient interest in the training plan so that he will provide good training and supervision? Are the facilities adequate for a well-rounded program of training? Is the occupation one that beginners may enter from high school, and does it provide enough opportunity for learning throughout the year that purely routine work will be avoided? Does the job offer opportunity for employment after training is completed? Is there opportunity for advancement? Will the trainee receive adequate compensation for his work? Does it provide a minimum of fifteen to twenty hours of work per week on the average? Is it accessible to the school? Finally, all hazardous occupations should be ruled out, as well as bars, liquor stores, and jobs which will keep the student out too late at night (32, p. 286-289).

Once a training station has been decided upon, a training agreement should be drawn up which fully outlines the duties and responsibilities of all those involved (see sample forms Appendix D).

Before a student is assigned to a particular job, he should understand that he must have time to keep up his regular school subjects as well as adequately perform his job. He should realize that his employer will expect him to be willing to learn to produce well on the job, that his coordinator will visit him, evaluate his progress, and help him to overcome his problems.

There are several ways of assigning students to jobs. All may apply where they wish; the coordinator may send one or several, or the student may find his own job. Before he applies, however, he should have training in interview techniques. If possible, it is helpful for the coordinator to have visits with the parents either at school or in their homes, before placement of the student (39, p. 190-195).

Summary

This survey of literature has been presented in order to provide a background from which to view current practices in work experience education. Down through the ages man has recorded his belief in the necessity of training the young to take a place in the productive life of the time in which they live. The opinions of various leaders in the field of current cooperative education practices have been examined in order to show how they feel this can best be done today.

Writers generally agree on the need for more involvement and

participation on the part of pupils, the entire school staff, parents, and the community in an expanding program of cooperative education. Next we will look at the results of the survey of actual practices in various schools in the State of Oregon.

CHAPTER III

FINDINGS FROM THIS INVESTIGATION

The findings from the questionnaires are presented in this chapter by sections, listing the opinions and reactions of the people completing the survey instrument as they are listed in the questionnaire. The findings are discussed in a narrative summary of the tabulations of the instrument in the following order: principals' remarks concerning scheduling, financing and administering the program facilities; coordinators' reactions to the questions; and student responses. Thus, the findings from the study can be related directly to the writer's questionnaires which are in Appendix A.

Under each of the major areas of the questionnaire, the findings are reported according to the three types of participating schools. Type A schools are those with 1,000 or more pupils, Type B schools are those with 500 to 999 pupils, and Type C schools are those with 499 pupils or less. Sixteen schools of Type A, five schools of Type B, and five schools of Type C, were selected to participate in the study.

Replies by the three groups of respondents are presented in table form in the appendix. These three groups are: high school principals, work experience coordinators, and high school students. A total of 507 questionnaires were completed by all groups in the

total schools involved in this investigation.

Responses were received from twenty principals for an 84 percent return. Fourteen principals of Type A schools responded, four principals of Type B schools responded, and two principals of Type C schools responded.

Questionnaires were mailed to twenty-seven teacher coordinators. Of this number, twenty-four vocational teacher coordinators responded giving an 88 percent return. Fifteen of these coordinators were from Type A schools. Six coordinators responded from Type B schools. Three work coordinators from Type C schools completed the questionnaires.

A total of 613 questionnaires were distributed to students in the selected high schools. Questionnaires were completed by 174 boys and 181 girls in Type A schools for a total of 355. From Type B schools, thirty-five boys and thirty-six girls responded for a total of seventy-one. Forms were completed by twenty-nine boys and twenty-seven girls in Type C schools. Questionnaires in all the schools were completed by 238 boys and 244 girls for a total of 482 pupils, which represent approximately seventy-eight percent of all those enrolled in the work experience programs in the selected Oregon high schools.

Twenty-six student questionnaires had to be eliminated as not contributing to the study and were not included in the total shown

above. Most of these questionnaires were blank or with sarcastic or joking replies to the items. In some cases the responses were not related to the items. A few students had written comments to the effect, "The whole school stinks," or, "I could care less." Some of these responses may have expressed the true feeling of these students with regard to the work experience program as it related to them. They could be considered as significant in this respect, as they may represent an honest view of the program to these individuals. However, there was no provision for including such responses in the tabulation.

Provision was made for the respondent to react to each item on the questionnaire. He was asked to indicate by a check the answer which most nearly described his feelings.

The tabulation of responses to all sections of the three instruments are presented in Appendix B.

General Organization

Principals were asked to respond to two areas: basic data and opinions.

The coordinators' questionnaire included three areas: basic data, instructional activities, and opinions.

There are four items included in the student questionnaire to which responses were requested. They included the following

areas: current status, opinions and attitudes, school activities, and basic data.

Principals' Responses

The tabulated responses to the two areas of the principals questionnaires is presented in Table 27-33 Appendix B.

Narrative summary of principals' responses concerning opinions and attitudes towards Cooperative Education Programs by the principals of these schools revealed the following: (copy of the instrument is included in Appendix A.)

- I. The majority of the twenty principals completing the questionnaire were of the opinion that:
 - (1) Job supervision created no major problems.
 - (2) The program was of real value to the students.
 - (3) They were willing to continue and expand the program of work experience education.
 - (4) This program was not creating any problem regarding financing.
 - (5) Most schools release students one third of the day for work experience.
 - (6) Scheduling of the released time for work experience education was no problem for senior students. Only two of the twenty schools released juniors and they indicated this created some

problems regarding meeting credit requirements for graduation.

- (7) Most schools replied that awarding of academic credit created no difficulties. One of the twenty schools awarded two credits for released time for work experience education. Eighteen schools offered one credit for fifteen hours per week and one school offered no credit at the time of this study.
- (8) Seven of the twenty schools placed the work coordinator on extended contract during the summer months.
- (9) All twenty schools used lay advisory councils to assist planning and advising the staff.
- (10) Five of the twenty schools have written criteria for selection and appointment of approved "Work Training Stations."
- (11) One of the twenty responded affirmative to the item, "Do you reimburse employers for providing work training stations?", with the reply, "partially, we assign some N. Y. C. students and the wages are paid from federal funds."

Principals contributed some comments that seem to be worthy of including in this study. One comment received from School District No. 4, Lane County, Eugene, Oregon, states:

The cooperative work experience program is planned to provide qualified students an opportunity to gain valuable work experience while still in school and to permit the development of additional skills as necessary to become an employee.

A student who is enrolled in the course will be taking four class periods of school work. One of these class periods will be the work related occupations class, one will be Modern Problems or a similar required class, and the student will be free to elect the other two class hours of work. The student is released from attendance for a portion of the school day in order to be employed in the local business firm. As a general rule-of-thumb, the student should be engaged in work experience for a minimum of fifteen hours per week. The work experience will entitle the student to one unit of credit; the class work in the course to one unit of credit.

A well-organized cooperative work experience program offers students an excellent opportunity to bridge the gap between instruction received in the classroom and practical training received on the job. The students will be offering the employer a minimum basic skill in several areas and in some cases may be offering an excellent basic skill in a special area. The employing firm should attempt to provide the student with a varied experience. Some designated person in the firm should assume the responsibility of working with the student and the coordinator to assure: (1) effective supervision, (2) rotation of job assignments, (3) opportunities for the students to learn modern business methods and procedures, (4) job standards that are equal to those in the classroom, (5) opportunity for the trainee to demonstrate initiative, judgment, and responsibility.

The employing business firm through the trainee supervisor and in cooperation with the coordinator will assist in evaluating student progress. A trainee rating sheet with the following suggested items should be prepared at least once each grading period: reliability, job proficiency, cooperation, punctuality, work attitudes, initiative, courtesy, poise, tact, judgment, ability to follow instructions, willingness to accept constructive criticism cheerfully, disposition, good manners and neatness. The final evaluation will be reserved as a prerogative of the coordinator.

Another comment received from Coos Bay stated: "Thank you for asking us to participate, the questionnaire afforded us an opportunity to assess some of the strengths and weaknesses (?) in

our program. "

Coordinators' Responses

Requests for information and opinions in three areas, basic data, instructional activity, and attitudes and opinions were sent to twenty-seven work experience coordinators in twenty schools.

Twenty-four coordinators in twenty schools responded. (Copy of the instrument is included in Appendix A.)

Narrative summation of the responses:

A. Basic Data

1. The average length of time on present job was four years. Responses ranged from one year to twenty-eight years. The median length of time as a teacher coordinator was three years.
2. The majority of the coordinators were concerned mostly with Distributive Education. Some merely listed responsibilities as "Work Experience Coordinator," four responded as "Diversified Occupations Coordinator," three were directly connected with agricultural cooperative programs.
3. The majority of the coordinators are on nine and one-half month contracts. Three listed twelve months and four replied they were employed on nine month contracts.
4. The responses to previous occupational experience were

varied. The following table summarizes the replies to this item. (please list any occupational experience and the number of years experience).

Table 5. Coordinator's Previous Occupational Experience.

Occupation	Number
Sales	20
Businessman	4
Service (Military)	3
Farmer	5
Automotive Service	8
Welder and Machinist	2
Building Trades	9
Electronics	2

5. Fourteen of the work coordinators indicated they presently hold (or have held) a labor union membership card.
6. All the coordinators responding indicate they teach all or at least a portion of the related classroom instructional program.
7. Three of the coordinators stated they do not desire to continue teaching in the area of cooperative education. One respondent replied to this question with a question mark.
8. The majority of the teacher coordinators expressed support and approval in belonging to and promoting related

professional associations. All but two coordinators belong to or expressed intent to join the A. V. A.

B. Instructional Activities

1. All the coordinators participating in this survey report they have written admission criteria for admitting enrollees in the work experience program. In all but four cases respondents stated the criteria was established by a committee consisting of the Administration, Guidance Personnel, Department Chairman and Work Coordinators. One coordinator replied that he establishes the criteria for admission and does the screening. Another indicated he involves employers in the admission and screening activity and has found this to be very worthwhile. One coordinator stated he uses the lay advisory committee to assist him in admitting student to the program. Another respondent uses the form developed by the "State Department" and does all the work himself.
2. All respondents select prospective students for the school year in the preceding spring. However, most indicated the door is not closed to interested students and often students are admitted in the fall or even during the school year.
3. Of the twenty-four coordinators completing the questionnaire, five replied that they do have written criteria concerning requirements for work training stations. Eighteen do not

have any written criteria or policy and one indicated a set of written policies is in the process of being developed. All coordinators reported that they meet with employers and discuss the requirements for a satisfactory work training station.

4. In response to the item, "Do you use an established lay advisory committee to assist you in planning and implementing the cooperative education?", nine answered no, thirteen answered yes, one replied "not yet," one coordinator left this item blank.

The uses of advisory committees can be illustrated by the following table:

Table 6. Uses of Lay Advisory Committees

Use	Number of Schools
Assist in planning related classroom instruction	14
Establishing criteria for admission to program	13
Developing grading practices & awarding of credits	2
Setting up requirements for work training stations	12

5. The question, "Are qualified work training stations available in adequate numbers?" drew mixed responses. The coordinators of schools in the larger metropolitan areas seem to feel there are an adequate number available. Coordinators from smaller cities are unanimous in the response that there is a

- shortage of placement opportunities for students.
6. Approximately one-half of the coordinators stated that they are expected to work during the summer lining up work stations, working on curriculum projects, and attending workshops. Only four coordinators indicated they are assigned work supervision responsibilities for students working at summer jobs.
 7. Most coordinators listed the job of "selling" the program to students, parents, and the community as one of the most important single factors in a successful program.
 8. The following chart summarizes the responses to the item, "What policies or guidelines have been established for conducting cooperative education programs in your school?"

Table 7. Policies Concerning Operation of Cooperative Education Program.

Written Policies	Number of Schools Establishing Policy
Definite Policy on pay for students	13
Written criteria for awarding credit	18
Minimum and maximum working hours	20
Policies concerning release time for on job training	19
Written criteria of acceptable grades in concurrent school classes for permission to continue in program	12

C. Coordinators' Attitudes and Opinions

The item in the questionnaire dealing with coordinators' attitudes consisted of a question and four answers. The instructions asked the coordinator to check the answer that he felt best expressed his reaction to the program in his particular school.

The following table reveals reactions of the respondents:

Table 8. Personal Attitude Teacher Coordinators Concerning This Program.

Suggested Answers	No. Responding
Enthusiasm	15
Optimism	7
Concerned	1
Pessimistic	1

Coordinators were asked to comment on the preceding question. A few of the comments are quoted as follows:

The most practical approach for selected students I know about. I would not have developed the program for twenty-four years, if I were not enthusiastic about it.

Helping young people is gratifying--it is especially rewarding to know that you are helping them learn ways that they will support themselves and their families. I also enjoy working with businessmen.

After seeing results--hearing from parents and former students I know it is a good program. Occasionally it is discouraging, however.

I see it as a real opportunity to help young people and the business community.

This type of a class offers so many opportunities that cannot be offered by the regular school day. I feel boys completing such a course are ahead of those that do not have the opportunity for such experience.

Provides maturing opportunities, responsibilities, funds for college, exposure to business opportunities and career choice, and prepared student for economic self-sufficiency. We need more such training and programs for realistic entry into living upon graduation from high school.

Number of students (90) enrolled next year. Satisfaction of the training stations regarding program.

Several respondents indicated they were concerned regarding the future of the program.

One comment is as follows:

There are some large unresolved problems; largest is that the students who most want to enroll in the program and whom the school administration would like to enroll are marginal students in both ability and attitude. Whereas the businessman with a training station wants higher levels of basic employability.

One assumption educators often make is that certain courses do improve that attitude and motivation of the students; such an assumption is often made concerning cooperative education. An item in the questionnaire was designed to solicit coordinators opinions regarding observable change in attitudes of students enrolled in the program.

In response to the question, "Have you observed any changes in the attitude of students enrolled in your program?", nineteen replied

"yes, I have," four replied, "no." When asked to list any changes in attitude they have observed, the following is a typical response to this item:

Poise, positive change toward club activities, learn meaning of work, better attendance, develop responsibility, improve other grades, more meaningful dedication to class related program due to increased awareness of need for formal training, cooperation improved, noticed improved appearance, attitude of students changed from "Drop out program" to "chance to learn to make money and get ahead" more responsive to efforts of vocational counselor, students seem to realize importance of gaining some training for future use, students seem to be developing a point of view between relationship of some school subjects and the world of work.

Coordinators were asked to list suggestions to be considered for improvement of the program. Many suggestions overlap, therefore, the following typical responses are presented:

I have many; this is not enough space to enumerate them; believe that each school having different types of work experience programs must provide adequate funds to develop a wide range of instructional materials.

I would suggest that the main thing to be done to improve the vocational programs is to inform school counselors and administrators adequately about the programs and the importance of them for students and their futures.

Counselors need to know what the program is.

Develop two year programs.

Require a basic level of job proficiency before a student is dismissed early from school. Give school credit for on the job experience. Recognize that the program is for the average and above student.

Better rapport with guidance people in selection of students.

Improve the public image both in the school and the community. These programs are not "Drop Out Ville."

Better recruitment and selection of qualified individuals to conduct this type of program. Greater expansion of the Distributive Education Program throughout the state. Education of counselors, administrators, teachers of the purposes of the program in state.

In response to the item "Do you think efforts should be made to continue and expand the cooperative education program?", all but two of the twenty-four respondents replied in the affirmative. More than half of the coordinators listed concerns and suggestions regarding cooperative education program on the reverse side of the questionnaire. Recommendations presented in Chapter IV reflect many of these concerns.

Results of Student Survey

Current Status

The questionnaire distributed to 613 students enrolled in selected Oregon High Schools is divided into four sections: current status, opinions and attitudes, school activities, and basic data.

Students were given the following instructions:

- A. The intent of this survey is to study the activities, procedures and instructional organization of Cooperative Education Programs in the State of Oregon.

- B. You are asked to express your reactions to the different phases of the program in which you are enrolled.
- C. You should know that your sincere responses to the items will be of real value to educators in attempting to establish effective vocational programs for interested youth.
- D. You can be assured that your comments are confidential, inasmuch as we will not connect names and comments. In fact, we do not need to know your names for the purposes of this study.
- E. Please open the form and check the squares that express your feelings and opinions toward the work experience program. You may have all the time you need and may take this form home and return it tomorrow if you wish.

Exactly 489 students did fill out the questionnaire. Some questionnaires were discarded and not included in the survey. Tables of the responses were constructed to illustrate the specific responses of the students. (Tables 49 to 67, Appendix B) The information presented in this chapter is a narrative approach to present the student response to the items in the questionnaire.

A. Current Status

The purpose of this section of the questionnaire was to find out what type of program students were selecting, what kinds of work

training stations were being used, and the types of jobs students were performing.

1. Students were asked to state what kind of program they were taking. The following table was constructed to indicate the types of programs students were enrolled in:

Table 9. Programs and Number of Enrolees.

Type of Cooperative Education Program	Number Enrolled
Distributive Education	283
Diversified Occupations	39
Vocational Homemaking	0
Cooperative Office Education	113
Cooperative Vocational Agriculture	43
Other	4

What jobs were being performed by the students enrolled in the above programs? Table 10 was developed to illustrate student response to this question.

Attitudes and Opinions

Several approaches were developed and used in the evaluation of the student questionnaire in the attempt to gain some insight into the attitudes and opinions of students enrolled in work experience education programs. The first questionnaire submitted to 190

Table 10. Jobs are Work Training Stations.

Job or Work Performed	Number
Retail Sales	127
Automotive Service	57
Farm Equipment Sales and Service	3
Warehouse and Delivery	26
Food Service	54
Office Work	121
Cheese Factory	1
Custodial or Clearing	3
Builders Supply	4
School Store	8
Lumber Mills	2
Grocery Stores	33
Farming and Dairying	23
Landscape and Nursery	1
Construction	1
Candlemaking	1
Retail Clerk	49
Amusement Industry	2
Farm Supplies	7
Child Care	6
Hospital Services	6
Laundry and Dry Cleaners	6
Food Processing Industry	9

students working in the Lane County Intermediate Education District operated Neighborhood Youth Corporation Program revealed the following information:

1. A check list type response was better received by the students.
2. The writer's vocabulary and sentence structure was not clear to the students. Therefore, the questions and responses were rewritten.

The second draft of the student questionnaire was developed and submitted to students enrolled in Springfield High School Cooperative Education Program. This draft asked students to list attitudes and opinions in their own words in order that the writer might rewrite the possible responses to the questions.

The third draft was tested on another group of seventy-three cooperative education students working in a Springfield School District Summer Work Program in Forestry and School Maintenance. The results of the third draft were discussed with the major professor, State Department of Public Instruction, Division of Vocational Education Personnel, Pupil Personnel specialists from Lane County Schools, Beaverton Schools, Oregon State University Guidance Department, Dr. Dale Parnell and his guidance staff at Lane Community College, the Oregon State Research Coordination Unit and thirteen vocational teachers enrolled in a Cooperative Education class

at Oregon State University. The recommended changes and modifications were made and the instrument submitted to the students was the fourth draft. This instrument was submitted in proposal form to the writer's committee. The Survey Topic and title along with the proposal was submitted to the major professor and Dean Zeran for approval.

The instrument was designed to provide some insight regarding enrollee's feelings, opinions, attitudes and thinking about Work Experience Education Programs. The section dealing with "Opinions and Attitudes" is divided into ten areas; reasons for enrolling, opinion of relative value of the program, first reaction to the program, present opinion of the program (questionnaire was given to students in the spring), friends' reactions to the program, parents' opinions concerning the program enrollees' evaluation of the work training station, and employer-student suggestions concerning organization and implementation procedures currently in use in their respective schools to operate the work experience education program.

The attempt to measure an attitude is admittedly a difficult undertaking. The student responses to the questions in this section lend themselves to liberal interpretation and the prejudices of the investigator must be considered in evaluating the narrative summary of the responses.

The following summation is an attempt to reflect student

reactions as accurately as possible:

The question soliciting enrollees' reasons for enrolling in the program, "What reasons did you have for enrolling in the program?", provided the students a choice of twelve possible responses.

The following table reveals students' reactions to this question.

Table 11. Reasons for Enrolling in Cooperative Education Program.

Reasons	Number of Responses
Wanted to learn something that I could use to get a job.	84
Friend talked me into it.	30
Counselor suggested I might profit from the course.	51
I knew the coordinator and thought the program must be pretty good.	25
Parents advised me to enroll.	29
My (friend) (relative) was in the program and told me about it.	39
Couldn't think of anything else to take.	35
It was an opportunity to make money and I needed money.	55
I plan to go into this type of work for a career. This is part of my educational training.	44
Employer talked me into it.	4
Wanted to learn how to work.	8
Wanted out of school.	14

The reasons and the distribution of responses is varied, and perhaps the only valid generalization that can be drawn is that the majority of the students indicated a positive reason such as personal advancement or vocational training and a minority of the respondents enrolled specifically to get out of school and make money.

The item regarding students' opinions of the relative value of the program was approached from many directions. The original purpose was to get students to place cooperative education on a scale of relative worth as compared to other subjects or courses. Experiences with the rough drafts of the questionnaire with experimental groups proved very discouraging and the item included in the questionnaire was eventually simplified to read, "What is your opinion of Cooperative Education Programs?" Respondents were provided seven responses and the responses were worded to reflect the answers students involved in Cooperative Education Programs gave the writer in a series of interviews with members of the group who filled out the first draft of the questionnaire. Four responses indicate a favorable opinion of the program; two responses reflect a negative opinion, and one response reveals indifference. Students' responses indicate that 354 or eighty-five percent react favorably to work experience education. Forty-four or eleven percent expressed unfavorable opinions and seventeen or four percent reacted with indifference.

Table 12. Student Opinion of Cooperative Education Program.

Opinions	Responses
Worthwhile	231
All right	99
Acceptable	22
Don't like it	9
No opinion	17
Gives me confidence	2
Work O. K. , teacher boring	8

First impressions are thought by some to be an important factor in success or acceptance of a program or activity. A question in the instrument was included in an attempt to ascertain what were the first impressions of enrollees in a Cooperative Education Program regarding the program they had selected.

The question was, "What was your first reaction to the program?" The responses were generally either favorable or expressed a "wait and see" attitude, as illustrated by the Table 13.

The succeeding question was included to inquire into whether or not the enrollees opinions had changed to any degree and to determine if the lack of knowledge regarding Cooperative Education Programs could be a factor in the failure of many students to enroll in these programs.

Table 13. First Reaction to Program.

Opinion	Number
Good idea	193
Wait and see what I think of it	129
Didn't want to take part	26
At first nothing, now great	16
Indifferent	28
Expected more	12
Doubtful	10

Students were asked, "Have your attitudes or feelings toward this program changed since you started working? Of the 453 responses to this item, 368 or eighty-one percent indicated a positive change. Eighty-five or nineteen percent replied they experienced a negative change in attitude concerning the value of the program to them.

A premise some school administrators believe valid is that students often sign up for courses because of the influence of friends rather than through careful analysis of the course and its relative value to the academic and vocational needs of the student. Another item in this section attempted to test the validity of this assumption regarding the effect of friends or students choosing cooperative education. Of a total of 435 responses to the question, "Did you have any friends working in this program?" 354 students or eighty-one percent stated, yes; eighty-one or nineteen percent replied, no.

In attempting to determine how these friends seemed to react to the program the following question was asked, "What do you think your friends think of this program?" Of the 408 students responding to this item, 262 or sixty-five percent indicated they thought their friends approved of the program. Seventy-two or seventeen percent replied they thought their friends did not approve of the program and seventy-four or eighteen percent stated they thought their friends were indifferent toward the Cooperative Education Program.

The influence parents exert on student course selection is often more evident in assisting college-bound students select a program of studies. The influence or opinions of parents in guiding and advising vocational students is not always as easy to discern. The writer attempted to solicit from students participating in this survey the student's opinion of the attitude of his or her parents toward the selection of a definite vocational course. Table 14 best illustrates the replies to the question, "How do you think your parents feel about this program?"

The responses seem to indicate that a great majority of parents did approve and a considerable number encouraged their son or daughter to enroll in the program. Therefore, it is possible to conclude that a considerable number of parents do support vocational educational programs for their children.

Table 14. Student Opinions of Parent Reaction to Cooperative Education Program.

Response	Number of Responses
Approve of it	234
Encouraged me to take this program	81
Think it is O. K. for a course, but want me to go to college	53
Agree I could take it	2
Did not approve	13
They didn't like it at first, now it's O. K.	2
No comment	2
Don't know anything about it	14

The literature concerned with Cooperative Education is definite in the conclusion that a worthwhile work training station is a vital part of a successful Cooperative Education Program. In an attempt to determine how students reacted to their work training station, the following question was included in the questionnaire: "What do you think about the job you have?" Thirteen responses were provided. Six were designed to indicate a positive response and one response was included to indicate indifference. Of the 412 students responding to this item, 324 liked their job, sixty-two were somewhat critical and twenty-six seemed to react with indifference.

Acting upon the assumption that some educators believe -- "people react to human relationships more than they do to

environmental conditions," the next item was included to attempt to ascertain how students reacted to their employers. The item was, "What do you think of your boss?" The checklist of replies to this question were divided as follows: six of the listed replies indicated a positive feeling, five items a negative response and one item stated an indifferent reaction. A total of 414 responses with 348 students responding in a positive manner, sixty negative responses and six indifferent responses were received.

One page of the questionnaire was devoted to soliciting students' suggestions to several factors considered important in planning and implementing a Cooperative Education Program. It would serve no real purpose to list all the responses to this portion of the questionnaire. Therefore, a compilation of the student suggestions common to several students was made and the results illustrated in Table 15.

Cooperative Education students seemed to be concerned with the lack of time in the school day to "go to library for required book reports," and time to study for other subjects. They expressed concern for lack of any preference in getting "into" certain classes. They indicate they only had a half day for other subjects and seem to feel they should get some preference.

Students were asked to submit suggestions concerning credits and grading (Table 16).

Table 15. Suggestion Regarding Scheduling.

Suggestion	Number of Students Submitting Suggestions
At least two full periods of release time	18
Make the program a 2-yr. program, class work junior year - work senior year	64
Fifteen is too many hours per week	11
Rotate schedule - some work mornings, some afternoons	36
Give work experience kids some preference in getting in to other classes since they are gone half the day	51
Have some flexibility in changing classes if job hours are changed	14
No rotating modules for work experience kids - need a consistent schedule	8
Have related class three days a week, other two for study hall (especially library study privileges)	26
Schedule related class during evenings, more time for other electives (drama, band, etc.)	18

Table 16. Credits and Grading.

Suggestion	Number of Students Submitting Suggestions
Allow two credits for Cooperative Education Program	16
Ag. kids get credit for summer work, why shouldn't all kids get it	11
Should get only Pass or Fail grade for work program, not count on G. P. A.	19

In general, students seemed to agree that present criteria for awarding credits and existing grading procedures were adequate and acceptable. Most students responded to this portion of the questionnaire with the comment "fine," or "I think the present way is good," or "no improvement."

The item concerned with suggestions regarding admission procedures was not completed by most of the students. The students responding to this part of the questionnaire seemed to be concerned with availability of jobs and setting higher standards, as the following table illustrates:

Table 17. Admission Procedures.

Suggestion	Number
Shouldn't have to join DECA to get in	7
Shouldn't let a bad grade from last years' teacher keep you out of the program	14
Should screen out more of the "crumbs"	26
Should have to have job, or one available before you get in	34
Should be made to keep grades up in other classes	18
Counselors should know more about it	31
Limit enrollment to available jobs	21

Reactions to the item, "Do you have any suggestions concerning on-job supervisor?" drew more response than any other request for suggestions and as the following table illustrates concerned more time

and attention from the supervisor. Students also seemed to feel the supervisor should exert more authority.

Table 18. On-job Supervision.

Suggestion	Number Submitting Suggestions
More time spent in visiting job	36
Need more personal attention from supervisor in talking about job	5
Make class work relate to jobs-- supervisor needs to get around more	14
Supervisor needs more authority	9
Need more supervisors	21
Encourage students to supervise and criticize self	6
Supervisor should replace "goof-offs," even if boss doesn't	13
Supervisors should place all new students on probation on the job	26

Extracurricular Activities

Students were asked to list any clubs or activities they participated in. Table 19 lists the responses. Many students did not respond to any of the items in this section.

The question "Did you take part in these same activities last year?" was answered in the following manner: Yes - 205, No - 181.

Students responded, Yes - 272 and No - 178 to the question, "Do you think school activities are worth what they cost in time and

effort?

Table 19. Activities.

Activity	Number
Drama	37
Music	13
Future Homemakers	25
Future Teachers	9
Speech	11
D. E. C. A.	126
Miscellaneous Clubs	11
Athletics	107
Other	16

One problem often encountered by students and school officials in determining the relative value of cooperative education is the assumption that cooperative education programs prohibit enrollees from taking part in the school activity program. Students participating in the survey were asked, "Does the time spent working in the cooperative education program eliminate you from taking part in as many school activities as you would like?" The response is as follows: Yes - 158, No - 262.

Educators have advanced the premise that club activities have real value in developing loyalty and friendships with the resultant "sense of belonging" to a school and the "student body." Vocational educators have learned from experience that club activities do have

value in developing a cohesiveness to the program. The writer was interested in student reaction to these assumptions. The question dealing with this information was written, tested on students, and rewritten several times. The question concerned with this factor included in the survey was simplified to read, "Do you think taking part in school activities is a good way to make new friends?"

Due to the over-simplification of the question, the results cannot be given the value the writer originally hoped for. However, the answers to the above question do indicate students feel that activities do have value in establishing friendly relationships; 299 students answered "yes," only forty-nine responded in the negative to this item.

Basic Data

The section dealing with personal information was purposefully positioned in the back of the instrument in the hope that students filling out the questionnaire would begin to see the purpose of the survey, and, therefore, be more cooperative in supplying basic personal data that would enable the writer to draw some conclusions regarding family background, and academic and vocational preference of students presently enrolled in Cooperative Education Programs.

The statement, "vocational education is for the terminal student," is a popular concept at the present time and in fact may be

very true. However, the writer was interested in the opinions and future plans of students enrolled in vocational programs. The results to the item asking students to express their educational and vocational plans seem to indicate that students enrolled in these programs do not see themselves as terminating formal education upon high school graduation.

The student response to the question, "What do you plan to do when you leave the program or graduate from high school?" is presented in the following table:

Table 20. Respondents Future Educational Plans

Plans	Number of Responses
Attend a four year college	81
Attend a Community College	130
Attend Business School	21
Attend Beauty College	15
Attend a Trade or Technical School	5
Go into the service	50
Go directly to full time work	61
Get married	38
Don't know	31

Some interest has been expressed by teachers and administrators regarding the number of students presently enrolled in Oregon High Schools who started their education in some other state.

One question included in the questionnaire was "Were you born in Oregon?" Of the 465 replying to this item, 315 or 67 percent replied "yes"; 150 or 33 percent replied in the negative.

Leading educators in our nation are becoming more concerned with the concept that we must eliminate the division between academic education and vocational education. Educators are developing many programs designed to meet needs and interests of vocational students. Often programs are developed on the premise that vocational students don't like or want to enroll in English, Mathematics, Social Studies and other "academic" courses, and, therefore, we need to modify existing academic programs to meet the interests and needs of vocational students.

One of the concerns of this survey addressed itself to this question, "What courses do vocational students 'like?'" Students were asked to check the courses they liked best from a check list of seventeen courses. These courses were divided into seven "academic type" courses and ten "vocational type" courses. Of the students responding to this item 286 or 62 percent expressed a liking for "academic" courses and 175 or 38 percent indicated they preferred the "vocational" courses. No conclusions can be reached from such a limited sampling. Perhaps some food for thought is presented and maybe the results do justify asking the question, "Do vocational students actually dislike 'academic' courses?"

There is considerable controversy and lack of agreement concerning the effect Cooperative Education has on the attendance and academic achievement of the enrollees.

Two items were included in the questionnaire to determine what enrollees thought about this matter, "Do you think participation in the Cooperative Education Program has affected your attendance and grades?" Students who answered "yes" were asked, "In what way, better or worse?" 260 students answered "yes." Of the students responding "yes," 178 or 69 percent indicated "better," 82 or 31 percent indicated "worse."

This information would seem to suggest that students do not share the concern of some educators that Cooperative Education Programs have a detrimental effect on attendance and grades.

The writer attempted to include an item in the form to "check" or "validate" the response the students made to the items concerning future educational plans by including a question concerning future vocational plans, "What occupation do you plan to follow?" Seventeen occupational clusters were listed and respondents asked to check one. Two clusters required at least four years of college, eight of the areas usually require community college or technical school, one was concerned with military service, two areas require apprenticeship training, and the remaining five required no post high school training.

The following table illustrates students' responses:

Table 21. Post High School Plans.

Training Required for Occupation Chosen	Number
Four year college	56
Community College or Technical School	106
Apprenticeship program	32
Military career	10
No post high school training	41

The response to the preceding items do compare favorably with the respondents replies concerning further educational plans. The fact that out of the 415 students answering the question "Have you decided on a future occupation?" only 245 high school seniors enrolled in vocational education courses could reply "yes" and 170 replied "no," seems to be of some significance to counselors and vocational educators.

Perhaps it would be of value if vocational educators were to place more emphasis on the occupational information service of the guidance department and utilize these services as an integral part of the class related instruction and the pre-vocational occupational education program.

Summary of Narrative Response of Three
Groups of Respondents

The results of the questionnaires returned by principals provided very little information that was not already available, (i. e.)

1. Principals do give approval to Cooperative Education.

They indicate it does not present any serious problems in organizing, implementing and financing that cannot be handled with little difficulty.

2. Few principals have any first hand experience in this area.
3. Most principals delegate both the responsibility and the task of generating enthusiasm for this program to teacher coordinators.

The returns from teacher coordinators revealed some interesting information:

1. The selected Oregon High Schools are fortunate in having teacher coordinators who are experienced, competent, and "sold" on these types of educational activities.
2. Teacher coordinators have developed effective systems for screening and admission of students, placement of students, selection of work training stations and use of lay advisory committees.
3. Teacher coordinators revealed some concerns, particularly in selling the program, providing adequate on-job

supervision, and developing closer relationship with school counselors.

4. Teacher coordinators agree that the program of cooperative education is of real value and are willing to expend time and energy in developing and expanding this type of educational program.
5. Often Work Training Stations are not fitted into the total program as much as students are required to fit into the requirements of the employers with the results that there is very little continuity between the class related instruction and the work activity.

Student questionnaires indicate that students:

1. Rated the total program as worthwhile.
2. Feel that there is a need for more information concerning this program to be available to fellow students and parents.
3. Do not view this type of education as "terminal."
4. Suggest teacher coordinator be given more time and more authority to develop and supervise this type of program.
5. Generally approve of the scheduling, grading, and awarding of credit procedures established in the selected Oregon High Schools for operation of this program.
6. Think participation in the cooperative education program does not hinder student involvement in school activities

nor does it have an adverse effect on grades and attendance.

7. Feel employers often do not realize the educational goals of the program and need to be involved more in developing a better coordination of class efforts and job assignments.

Summary of Results of the Survey in Relation to the Objectives of the Study

Objective I - To determine by questionnaire and interview the opinions of students, coordinators and teachers, and administrators regarding the value of cooperative education programs in selected school districts.

Findings:

1. The program is worthwhile. (Principals - 86% affirmative, coordinators - 92% affirmative, students - 91% affirmative.)
2. Comments generally indicate that the program is not given enough attention or emphasis in the school and community.

Objective II - To study programs involving cooperative education in homemaking, distributive education, office education, agriculture, and trade and industry areas in the State of Oregon and other states and to survey selected programs to determine how they:

- A. Are determining the needs of students and employers and utilizing community resources in meeting these needs.
- B. Are selecting students for involvement in cooperative education programs.
- C. Are organizing and scheduling their programs.
- D. Are determining credits and academic grades.
- E. Are financing the programs.

Findings:

1. Of the twenty school districts studied, none had programs involving cooperative education in vocational homemaking. Distributive education work experience programs had the greatest number of enrollees among students surveyed - 59%. Commercial or office education programs had 23%, vocational agriculture - 9%, and diversified occupations 8%.
2. All school districts reporting had completed community surveys to determine the needs and resources of the community. Fifty-nine percent use lay advisory committees in some phase of the organization and implementation of the program in meeting community needs.

3. A significant deficiency in the organization and operation of the program is the lack of attention given to the needs of the students as viewed by them. All planning revolves around community needs.

The programs are then presented to the students and those who wish to fit in may apply.

4. All twenty-four coordinators reported that they have written admission criteria for selecting enrollees and the majority of these are established by a committee which includes administrative personnel, guidance personnel, department chairmen, and coordinators. All schools use various media to promote the presentation of the program to the students. Only one school reported that students and employers were actively engaged in promoting student enrollment.

5. The majority of the schools--80%--are scheduling two periods of work-release time per day. Two schools release students for one-half day and two schools reported no set pattern. No schools reported scheduling problems.

6. Seventeen of the twenty schools give one hour credit for fifteen hours of work experience per week,

two schools give two hours credit, and one school gives no credit. All schools surveyed reported that grades were determined by the teacher coordinator and the employer.

7. Fourteen of the twenty schools surveyed reported no special provisions were made for financing the program. Two schools reported that they allocated \$150.00 more per student per year for this program than for their academic classes, and one school reported an additional \$250.00 per student per year for this program. One school reported in excess of \$250.00 per year more and two schools reported no figures were available.

A purpose of this survey was to determine how well programs of cooperative education in selected Oregon high schools were felt to be functioning in meeting the needs of pupils. This was to be accomplished through an analysis of the responses to questionnaires by high school principals, teacher coordinators, and pupils in the schools involved in this investigation. Additional information was to be collected by a survey of programs operating in other states.

Conclusions

Using the data from these findings, the investigator has drawn the following generalizations concerning cooperative education in these Oregon high schools.

Type A Schools

The "typical" Type A high school has a program of cooperative educators services in which the provisions or conditions in the total program are functioning adequately. Each of the respondent groups evaluated their respective programs as follows:

Table 22. Evaluation of Program Type A Schools.

Area	Evaluation
Selection of students	Adequate
Financing	Adequate
Scheduling	Adequate
Class related instruction	Adequate
Grading and credits	Adequate
Work training stations	Fair
On-job supervision	Needs attention
Related counseling program	Adequate

The teacher-coordinator-student ratio is one coordinator for every thirty-two students. The coordinator time provided in the "typical" school is generally considered to be adequate. The

vocational counseling time and materials available in the "typical" school would be considered good in meeting the needs of the pupils. Two principals in a "typical" Type A high school have had some experience as a vocational teacher in either junior or senior high school.

Coordinators in the Type A schools are teaching under a variety of certificates. Approximately ninety percent hold a valid Vocational Certificate, while the remainder are teaching on certificates classified as Provisional, Regular Secondary, or the Standard Norm.

Type B Schools

The picture presented by the "typical" Type B high school is very similar to that of the Type A high school. Each of the eight areas of the Cooperative Education Program is rated the same as in the Type A high school. The "typical" Type B high school has a program of work experience education which is felt to be functioning at an 'adequate' level in meeting the needs of its pupils.

The coordinator-student ratio is one coordinator for every twenty-four pupils.

Two of the principals in the Type B schools have had some experience as a vocational teacher in either junior or senior high school.

Approximately ninety-five percent of the teacher coordinators

in Type B high schools hold a valid Vocational Certificate, while approximately five percent are teaching on certificates classified as Provisional, Regular Secondary, or the Standard Norm.

Type C Schools

Type C high schools have a program of cooperative education unlike the programs found in the Type A and Type B schools inasmuch as the size of the program necessitates different standards for evaluation. The provisions or conditions in the total program of cooperative education are felt to be functioning well in meeting the needs of the pupils primarily because of the size of the programs and the fact that there is more coordinator time to help meet the needs of the students.

The eight major areas of the program of cooperative education in Class C high schools are considered to be functioning as follows:

Table 23. Evaluation of Program Type C Schools.

Area	Evaluation
Selection	Good
Financing of program	Good
Scheduling of students	Good
Class related instruction	Good
Grading and credits	Good
Work training stations	Need improvement
Related counseling program	Good

Total Schools all Types

The only major area of the total program which is considered to be functioning less well in Type C school than in the other two types is work training stations, which is considered to be needing improvement in Type C schools.

The teacher-coordinator-student ratio is extremely different in the Types A, B, and C schools. In the Type C school this ratio is one teacher coordinator for every sixteen pupils, while it is one teacher coordinator for every thirty-two pupils in the Type A school and one coordinator for every twenty-four pupils in the Type B school.

The informational guidance service provided coordinators in the Type C school is considered as needing improvement by all the coordinators. The coordinators in the Type B schools consider this assistance as being adequate while the coordinators in the Type A schools feel the guidance services provided them is good.

None of the principals in the Type C schools have had experience as a vocational teacher. This compares with two of the principals of Type A schools who have had experience as a vocational teacher and two of the principals of Type B schools who have had vocational teaching experience.

Sixty-six percent of the vocational instructors hold valid Vocational Certificates in the Type C schools. This compares with

ninety-five percent of these instructors holding such certification in the Type B school and only ninety percent in the Type A school.

Although the findings from this study represent responses from over 600 individuals in schools of a wide population and geographical distribution, it is worthy to note the similarity in the ranking of the eight major areas of the total program of cooperative education among these three types of schools.

This is borne out when the average ratings by all groups in the total schools rank the eight areas in about the same order. A comparison of the rankings of these areas in the total schools shows the following:

Table 24. Evaluation of Program all Schools.

Major area	Rank	Type of Schools
Selection of students	Good	All three types
Financing the program	Good	All three types
Scheduling	Good	All three types
Class related instruction	Good	All three types
Grading and credits	Good	All three types
Work training stations	Good	Type A schools
	Fair	Type B & C schools
On-job supervision	Good	Type B & C schools
	Fair	Type A schools
Related counseling procedures	Good	All three types

The greatest divergence of responses among all groups in the total schools appears in the On-Job Supervision. The Type A schools rate this area as fair, the Type B schools rank it as adequate and the Type C schools rank on-job supervision as good.

The principals in these schools tend to give more favorable responses to the major areas of a cooperative education program than do other respondent groups. Principals in the Type B and Type C schools gave the adequate rating to their programs while the principals in the Type A schools gave fair to good ratings to their programs.

The teacher coordinators tended to give the lowest ratings to their programs of On-Job Supervision.

Conclusions Regarding Students Responses--All Schools

At the present time the greatest number of enrollees appear to be enrolled in Distributive Education Programs. The majority of these enrollees are placed in Work Training Stations concerned with sales. Students indicate they are of the opinions that Cooperative Education Programs are "worthwhile," should be expanded and need to be publicized more.

Chapter IV will utilize the results of this survey in making recommendations for improving Cooperative Education Programs in Oregon schools.

CHAPTER IV
RECOMMENDATIONS

Introduction

The great complaint of today's youth heard from all sides is, "We are left out of the mainstream of American life." This survey has pointed out the validity of this complaint (see Table 50). Psychology has taught us that every individual has a need to feel useful and needed. We in the United States pride ourselves on our ability to give our children everything they need; yet we fail to recognize how poorly we are actually providing for this basic need. We tell them to spend twenty to twenty-five years preparing for the time when they will become useful citizens even though we know all the time that impatience is common to all youth and the age of twenty-five is almost a never-never land to the fifteen year old.

We note, as is mentioned in the review of literature, that past generations had a place in their work for the young. Often a ten year old could feel that his contribution was essential to the well-being of his family. Today, many young people grow to maturity without ever having ever seen their parents at their work, let along^e having helped with it. We spend a great deal of time and money entertaining and amusing our children, but rarely do we give them an opportunity to be a part of the productive areas of life.

There are many by-products of value, facets to the idea that all individuals learn to appreciate the contributions of others. Rare is the person who does not gain satisfaction from his ability to perform

with skill tasks which lie outside the academic fields, no matter how academically oriented his life work may be. Persons who know their contributions to be a necessary part of our society perform with more pride than those who feel ignored as indicated by student response in Table 54.

The task ahead requires revision in our traditional attitude toward the role of the school. Changes in our mode of life, higher standards of living, and even in some cases, labor laws designed to prevent the exploitation of children have combined to block out a very important part of the education of our young in the opinion of students completing the questionnaire (see page 76). Cooperative education offers an obvious instrument for reinstating that education.

There are many arguments against the idea of adding more burdens to the already crowded curriculum of the schools. Certainly the task of providing the needed experience will be neither simple nor easy, but where else can it be done? It cannot be left to individual effort. Many adults do not even recognize the need, and many of those who do have no knowledge of how to proceed. Our Cooperative Education programs have provided us with an experimental background, and with knowledge of how to proceed. They must be expanded and enlarged. We can no longer afford to deny a large segment of our population the benefits of being needed and useful members of society.

The next section of this study will be a theoretical model for a

Cooperative Education Program designed to operate at the secondary level. No doubt mistakes will be made, acceptance will not come easily, but as it becomes a stabilized part of the curriculum it should also spread downward through the grades.

Proposed Model for Cooperative Education for All Students

Overview of the Program

This program as conceived is designed to reach every student in grades 10, 11, and 12, in order to provide first hand knowledge of a vital part of our lives--work. It is not intended to supplant any part of the present curriculum, but rather to extend it and relate it to the world outside the classroom.

Where will we find the time? True, the academic day of the student seems long enough at present, but his work day is not long enough in most cases. Where once the home chores beckoned when the school day ended, now the streets are filled with young people looking for the "action." Most students indicate they have no problem in finding ten to fifteen hours a week to devote to learning about the world of work. Scheduling of classes can be arranged so that students can be freed for work at a variety of times during the day. The program can be particularly effective during summer vacation period when a more realistic work day can be achieved.

As envisioned for this program, the calendar year would consist of four work periods, one for each semester of the calendar year

and two for the summer period when students would work full time. A minimum of 180 hours of work would be required for each work period, and a student would be required to work at least three of the four periods each year unless a valid reason exists as to why he should be excused from work. In all respects, the student's work experience should be considered fully as important as his academic classes.

The jobs to be performed by students could be either on an individual or group basis. A student who was already employed would come under the supervision of the program during the periods for which he enrolled. For the purpose of placing students, the program should be organized into six basic areas:

- (1) Office and clerical occupations
- (2) Sales and distributive occupations
- (3) Agricultural and related occupations
- (4) Trade and industrial occupations
- (5) Service and homemaking occupations
- (6) Health occupations

A student could indicate his preferences and every effort would be made to place him in the area of his choice. A student who had received classroom training in an area would have priority in obtaining a job in that area.

No student would receive pay for his work during his first period of enrollment in the program unless he was continuing on in a

job already held. The first work period would be considered one of training. After that, however, he could be paid.

Certain time-consuming extra-curricular activities, such as participation in a sport, would require that a student be excused from working on a job, but that student should be considered as enrolled in the program.

To be effective this program should be organized and administered by groups of students and adults working together. The framework should be as general as possible in order that students themselves may determine their needs and act upon them. Following are suggestions for implementing the program.

Determining Needs

In viewing Cooperative Education as a requisite for all, many more needs become apparent than have previously been recognized. In the past, studies were made on unemployment and of future employment possibilities in the area and an attempt was made to educate individuals toward fitting in to those spots not already filled. Good work habits, a skill which fitted in with society's needs, a statistic on the employment side of the ledger, rather than the unemployment side--these were the primary considerations. Of course, often there were by-products in the form of pride, character growth, better understanding of the life of adults and these were good but not the

primary need. The role must be reversed. Individual needs must come first. When these are met first, the needs of society will become the concern of the individual.

The study revealed that cooperative education provides an excellent vehicle for teaching not only productive skills and resulting values but introducing the student to the world around him, where he can associate with many people and absorb a more realistic cross section of his environment that can be experienced in a strictly academic school program. The student's knowledge of economics, social conditions, application of the principles of scientific knowledge and current political trends can be enlarged by participation in the world of work. This type of experience would be of value to the student regardless of his academic plans or professional goals.

The first step must be the enlistment of cooperation from all segments of society. Recognition must come that adults need the help of youth as much as youth needs to be a part of the adult world.

Panels of students and adults should be organized to plan in many directions. First of all the group can plan for activities in the immediate environment, the schools, in which they can be organized to do necessary jobs. Other groups can be organized to speak to organizations and publicize through various media their aims and objectives in order to enlist support. In actual practice there can be no distinct separation between determining needs and organizing

programs. As programs are being carried out new ones will be discovered and implemented in an unending procession.

Selecting Students

This program is designed to reach all students, therefore, it should be open to all. Probably acceptance would come more readily if it were not made compulsory at the beginning. As it grew and stabilized, however, the students might feel it necessary to make it a required course.

Organizing and Scheduling

In planning a total Cooperative Education Program for all students, it is vital that the school year be extended to include summer. It should be organized on a quarterly basis. A student could choose to take part in a different facet of the educational program each quarter if he so desired, but would not be compelled to take part in all facets. Probably the only compulsory responsibility would be that the student become involved in actual work on some type of job. Various facets and group responsibilities of this type of program are:

Planning and Organizing. This group would be the public relations people and administrators who would function with the economic community in discovering areas where needed jobs could

could be performed. They would find people with needed skills to help supervise and instruct those performing jobs, and would organize the actual performance of the job.

Placement and Trouble Shooters. These people would make decisions on assignments to jobs and would investigate complaints or suggestions from both workers and supervisors and decide on ameliorating changes or transfers.

This group would evaluate jobs on their merit both for the individual doing the job and for intrinsic value. They would thus be in a position to make suggestions to the planning and organizing group. They would also be the group to investigate the need for change in legal restrictions or regulations and possibly initiate lobbies to bring about that change.

On-job Supervisors and Coordinators. This group would have the responsibility of coordinating school programs and time schedules and supervising both student activities and job training stations to insure maximum benefits to both students and the community.

The Workers. This would be the largest group, but in actuality it would have little cohesiveness. It would include all the students. For those who had completed courses giving them technical skills, the jobs they held would preferably include the utilization of those skills. Some of the people would be working in groups as needed on

projects. Others would be working on an individual basis.

Selection of Training Stations. There is no shortage of job training stations. The Neighborhood Youth Corps program taught educators that if funds can be provided to pay students for labor, that a wealth of needs for these services do exist. Schools, hospitals, institutions for care of the handicapped and aged, city and county government agencies, are but a few of the institutions that found many needs for the services of youth. Many glowing reports of the real impact of the Neighborhood Youth Corps programs on the attitudes of youth and the acceptance by the community can be obtained in Neighborhood Youth Corps files throughout the nation.

Financing the Program

Financing this type of program could be complicated as well as costly; however, the problem of determining the scope of the needs and the sources of revenue are not insurmountable. The cost of the program will be large, but so is the cost of ignoring the needs of students. The Neighborhood Youth Corps programs offer very valuable resource information or financing a program of cooperative education both as to operational procedures and estimates of scope of the cost.

The program as envisioned would utilize both private and government financing. Students working in private business would be paid a predetermined wage by the business utilizing the services. Students working for governmental institutions would be paid from tax monies

raised by Federal, State or Local District taxes. Exact costs would not be difficult to predict on a year to year basis as the program progresses. Again referring to existing Neighborhood Youth Corps reports and evaluations as an excellent source of information regarding enrollee costs in Oregon. The probable controversy of who should finance the program will need to be resolved. The State seems to offer the most logical tax base and distributive capacity to finance the program.

The preceding recommendations are deliberately incomplete. A program such as this would need to be tailored to reflect the needs of each area.

The writer was prompted to develop and include the preceding recommendations by the statements of students and the feelings obtained from reading the responses to the questionnaires. Critics will be very quick to point out that it is not the role of the school to act as an employment service for students. Perhaps this is true. It is, however, the responsibility of the school to meet the needs of students and the need to engage in productive activity is a need not being met by the home and the community. The comprehensive high school is doing a commendable job of meeting the objectives it was designed to meet, i. e., developing academic skills, encouraging scientific curiosity, learning communication skills, fostering interests in art, music, literature and becoming aware of the social, historical and economic heritage of our culture. The responsibility of developing

productive skills and the resulting values was assumed by home and family. It is suggested that the high school must now assume the role of responsibility for reaching all students with productive skills and opportunities.

One of the original objectives of this study was to develop a recommended course of action for developing a cooperative education program. A program for immediate action as an intermediate step in developing a cooperative education program is presented in the following section.

Suggestions for Local Adaptations for Immediate Inclusion in Cooperative Education Programs in the Curriculum of the Comprehensive Secondary School

The preceding section deals with a theoretical model program that should be considered as a long range goal in a program designed to meet the needs of youth and the community. This section concerns intermediate actions that should be initiated in developing and expanding existing programs of cooperative education.

The Cooperative Education Program

For many years prominent educators have recognized the educational value of work. Work provides youth an opportunity for growth, which is not provided by any other part of the school curriculum. Although the need for youth to obtain work-experience is today greater than ever, many changes in our society have operated to reduce the opportunities. Through the cooperation of the home, the schools,

business, and industry, cooperative education can be provided for all our youth.

Cooperative Education Programs are directed programs by which students obtain practical experience in producing useful goods and services. This experience should be part of the regular school curriculum in addition to academic learning. The work situations are in business, industry, the community at large, or in the school simulated work laboratory.

In the cooperative education program, half of a student's time should be spent at school and half on the job in the community. The student earns educational credit for this work-experience. Also, the student is usually paid for his labor.

The key to this community-school cooperation is the teacher coordinator. He has a background of successful work-experience in the fields he is supervising. The coordinator is also a qualified teacher. About half of the coordinator's time is devoted to working with employers, students on the job, and parents. The rest of his time is spent at school, teaching cooperative education students job-related subjects.

The potential educational value of cooperative education programs is great. The few cooperative educational programs that are now operating in the State of Oregon, principally in distributive education, diversified occupations, vocational agriculture, and office education should be just a beginning. There is an excellent opportunity to expand vocational education programs through the addition

of many more cooperative education opportunities for students. The 1963 Vocational Education Act has greatly increased the financial assistance available for the expansion of cooperative education programs in all fields.

Some of the specific objectives of a desirable cooperative education program should be:

1. To provide youths an opportunity for a sense of worthwhile accomplishment.
2. To promote the attainment, by youth, of good attitudes and habits for work.
3. To provide an alternative or supplement for students who find the traditional curriculum inadequate.
4. To furnish exploratory experiences that provide the basis for vocational choices.
5. To promote a method for smoothing the transition from school to work.
6. To help some students with economic needs.
7. To motivate students by establishing connections between vocational life and school subjects (55, p. 18).

Many communities have found that cooperative education programs result in generally improved relations between school and community through processes listed below:

1. Increased confidence of the community in the ability of the schools to prepare youths for a useful life.
2. Teachers will be more aware of the work of the community, and thus be able to more closely relate their instruction to community life.

3. The social adjustment of youth will be aided by the development of desirable attitudes toward themselves, work, employers, and fellow workers.
4. Fewer youths will drop out of school because they will gain self-respect and self-confidence through work-experience, as well as an interest in school subjects relating to work-experience.
5. Both the employer and the community will benefit from having more satisfactory beginning employees and more efficient regular employees to serve the needs of society (55, p. 19).

Approach to Scheduling Cooperative Education Programs. This proposed approach to cooperative education is not new, the concepts or procedures suggested are not new; they are time tested principles; perhaps the structure and organization is different.

Basic overview of proposed approach for twelfth grade students: A student's day is divided into two halves (see Table 25), one half of the day is devoted to work at a regular job (semi-permanent in nature) in a local industry or business. The other half is spent in class (a minimum of three periods). The student is required to select two required subjects, English and Modern Problems, and one elective from the regular school program. In addition to this, the student must attend two two-hour classes per week, held in the evening.

Basic Components and tested precedents:

1. Split day work program operated many years in Distributive Education in Secondary School can be scheduled and has

been proven to be of value.

2. Placing students in local industry and business in a cooperative program has a long successful history.
3. Establishment of a four hour class in the evening (seminar or laboratory) related directly to the work activity. This has a tested precedent in the seminar classes being operated by colleges and universities in conjunction with intern and student experience programs.
4. Use of coordinators or supervisors, to establish industrial and business contacts, assist in placement and daily or weekly supervision, is a well established accepted part of Diversified Occupation, Vocational Agriculture and Distributive Education Programs.

Suggested Organizational Structure Implementing Procedures.

It would appear that to establish a program of this type a rather large work area or industrial complex would be needed (see Table 23.) One aspect in this approach is that in order to offer a complete program in the six basic occupational areas, six teacher coordinators, six evening teachers and a large varied labor market would need to be available; therefore, the program should be undertaken as a county unit on a cooperative activity involving several neighboring districts.

The approach to be presented in this study is an Intra-District Approach.

Scope of Program:

For the purposes of coordination and placement the program should be organized in the six generally accepted basic areas:

- a. Office and clerical occupations
- b. Sales and distributive occupations
- c. Agricultural and related occupations
- d. Trade and industrial occupations
- e. Service and homemaking related occupations
- f. Health occupations

Each area would include a complete general and occupational educational background offered during the ninth, tenth, and eleventh grade school years, as described in preceding pages. The counseling and guidance functions in advising students regarding occupational areas will not be discussed here, however. Young people scheduled into the Cooperative Education Program in the senior year should be provided with adequate testing and counseling if the program is to be successful for the student and accepted by the community.

Placement:

Arrangements for job placement should be made by one work coordinator or program supervisor (a real problem can be created when six different coordinators contact the same employer desiring job placement) for all areas. Placements can be made for part time

(one half day) jobs, or full time jobs wherein two students would be paired, each attending school for one half day and working the other half.

Placements will be in an occupational area that is compatible with the students expressed interest and the course work he has taken. Student needs will be given more consideration than the needs of the labor market.

Seminar and Skill Development Lab Sessions. These sessions would be scheduled two evenings per week for two-hour sessions.

The evening program could be organized as follows:

One hour per week, a group meeting of all students in one specific occupational area be placed in the same seminar group devoted to discussion of:

- a. Problems in adjustment
- b. Skills needed
- c. Boss and fellow employee relations
- d. New or different experiences to be shared
- e. Current Problems

Three hours per week to be devoted to lecture and lab aimed at developing specific skills needed to perform adequately in the occupational area in which the student is working.

Advantages

1. To student
 - a. On job training program
 - b. Coordinated concurrent vocational instruction

- c. Does not remove completely from main stream of school
 - d. Opportunity to earn and learn at same time
 - e. Opportunity to meet with peers in same occupational area, share problems and experiences
2. To Employers
- a. Opportunity to take active role in preparing young workers for their specific occupations
 - b. Opportunity to "look over" prospective employees
 - c. Gives employer a voice in curriculum development in vocational education
3. To School
- a. Gives more meanings to occupational education courses
 - b. Brings school and community in closer contact
 - c. May provide motivation to non-academically oriented youth
 - d. Since the program is operated on an optional half day basis, it provides more space in the existing vocational facilities
 - e. Offers schools an opportunity to share resources and staff to provide a "better education" in vocational education
 - f. Provides additional pay for vocational teachers

4. To Community
 - a. Provides a training program for development of a trained labor pool
 - b. Offers potential problem youngster gainful activities and some money to support himself
 - c. Provides young people with funds to purchase items they need. This could be of some value to the sales figures, but more important, studies of the N. Y. C. program in Seattle indicated that when young people have jobs, shop lifting and juvenile offenses drop off sharply.
 - d. Offers community an opportunity to assume an active role in the educational program

Disadvantages

- a. Difficult to obtain qualified staff, both instructors, coordinators, program supervisors
- b. Probable confusion in establishing a coordinated unit out of several independent school systems
- c. Parents and students may object to evening classes
- d. If program is of value and does a good job, graduates will be hired by industry and business and plug many placement opportunities
- e. Will cost more than a regular program that does not

include evening activities

- f. Pro-rating costs among several districts may create problems. This approach seems to offer some food for thought, problems do exist. A considerable amount of planning would need to be done if this type program is implemented. The advantages outweigh the disadvantages.
- g. Administrative organization may provide some problems. The most serious obstacle to this Cooperative Education or any other vocational education program seems to be the attitudes and images administrators, staff, parents and students have developed toward vocational education. The vocational education program cannot succeed as long as the idea of vocational education as a haven, for the non-achiever, the disturbed student, or the maladjusted pupil exists. We must not handicap the vocational education program. If the vocational education program is to be successful it must have the same advantages as the academic programs in the school. No program can succeed when it is used for the marginal students who do not fit the other classes.

Table 25. Cooperative education work plan

Half Day Class	Half Day Work	Seminar and Lab
School Day		2 hours twice a week evenings

SCHOOL DAY

English	Modern Problems	Electives
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WORK DAY

(Minimum) - 15 hours per week (Maximum) - 24 hours per week
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SEMINAR AND LAB

One Hour Occupational Problems	Skill Lab	Skill Lab	Skill Lab
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Table 26. Cooperative education student schedule

	A. M.		P. M.		EVENING
	CLASS		WORK		S E M I N A R L A B
Student A	English	Modern Problems	Elective	Cooperative Work Education	L A B
		P. M.			EVENING
	WORK		CLASS		S E M I N A R L A B
Student B	Cooperative Work Education	English	Modern Problems	Elective	L A B

Summary

Chapter IV presents a theoretical model of a cooperative education program for future consideration, a section concerned with local adaptations for an already established program, and an approach for scheduling a coordinated cooperative program in the six basic areas of vocational education.

BIBLIOGRAPHY

1. Altman, James W. and Robert W. Gagne. First interim report. Pittsburg, American Institute for Research, 1964. 59 p.
2. American Vocational Association. Administration of vocational education at state and local levels. Washington, D. C., 1964. 22 p.
3. _____ Definition of terms used in vocational education. Washington, D. C., 1964. 43 p.
4. Applegarth, Boyd and Lawrence D. Fish. A study of the relationship between employment opportunities and vocational education programs in Columbia County, Oregon. Salem, State Dept. of Education, Division of Community Colleges and Vocational Education, 1965. 84 p.
5. Arnold, Walter M. New directions in vocational education. American Vocational Journal 39:8-12. Oct. 1964.
6. Arnstein, George E. Vocational education. Bulletin of the National Association of Secondary School Principals 48(300): 56-72. 1964.
7. Barlow, Melvin L. The challenge to vocational education. In: Vocational education, the 64th yearbook of the National Society for the Study of Education, ed. by Melvin L. Barlow. Chicago, National Society for the Study of Education, 1965. p. 1-18.
8. _____ Curriculum development and the improvement of instruction. Bulletin of the National Association of Secondary School Principals 49(301):124-133. 1965.
9. Bateman, Richard M. Effect of work experience on the attitude of high school students toward school and school subjects. Educational Administration and Supervision 35(3):157-164. 1949.
10. Brockman, Louis O. Inauguration and development of cooperative work experience education in secondary schools. Bulletin of the National Association of Secondary School Principals 30(135):39-60. 1946.

11. Brookover, W. B. and S. Nosow. A sociological analysis of vocational education in the United States. In: Education for a changing world of work. Washington, D. C., 1963. Appendix III, p. 19-52. (U. S. Dept. of Health, Education and Welfare. Office of Education. OE 80021)
12. Burchill, George W. Work-study programs for alienated youth. Chicago, Science Research Associates, 1962. 265 p.
13. Byerly, Carl L. VEA 1963 holds unusual implications for large cities. School Shop 24:18-22. April, 1964.
14. California. State Department of Education. Occupational preparation in the high school. Sacramento, 1963. 6 p.
15. _____ Report of a study of work experience programs in California high schools and junior colleges. Sacramento, 1955. 101 p.
16. _____ State guide for cooperative work experience programs. Sacramento, 1965. 143 p.
17. Clark, H. F. Economic and social background of vocational education in the United States. In: Education for a changing world of work. Washington, D. C., 1963. Appendix III, p. 3-17. (U. S. Dept. of Health, Education and Welfare. Office of Education. OE80021)
18. Dugger, Roy. Vocational education act of 1963. Bulletin of the National Association of Secondary School Principals 49(301): 15-23. 1965.
19. Federal Board for Vocational Education. Cooperative part-time education. Washington, D. C., 1928. 35 p. (U. S. Bureau of Education. Trade and Industrial Series No. 36. Bulletin no. 130)
20. Frankel, M. L. Education for the economic challenges of today and tomorrow. Bulletin of the National Association of Secondary School Principals 49(304):52-65. 1965.
21. Gardiner, John. From high school to job. In: Annual report for the fiscal year ended September 30, 1960. New York, Carnegie Corporation of New York, 1960. p. 11-20.

22. Gibran, Kahlil. *The prophet*. New York, Alfred Knopf, 1927. 107 p.
23. Hampton, Robert E. *Work experience training program, its need, its promotion, and its establishment*. *Balance Sheet* 37:102-108. 1955.
24. Haskew, Lawrence D. and Inez Wallace Tumlin. *Vocational education in the curriculum of the common school*. In: *Vocational education, the sixty-fourth yearbook of the National Society for the Study of Education*. ed. by Melvin L. Barlow. Chicago, National Society for the Study of Education, 1965. p. 64-87.
25. Harris, Norman C. *Meeting the post high school needs of the vast middle group of high school graduates*. Paper read before the meeting of the North Central Association of Colleges and Secondary Schools, Chicago, March 26, 1963.
26. _____ *Redoubled efforts and dimly seen goals*. *Phi Delta Kappan* 46(8):360-365. 1965.
27. Havighurst, Robert J. and Lindley J. Stiles. *A statement of policy for alienated youth*. *Phi Delta Kappan* 46(8):289-293. 1965.
28. Hecht, George J. *Young people may not be able to find jobs unless . . .* *Parents Magazine* 39(5):34. 1964.
29. Hunt, DeWitt. *Work experience education programs in American secondary schools*. Washington, D. C., 1957. 93 p. (U. S. Dept. of Health, Education and Welfare. Bulletin no. 5)
30. Illinois. *Governor's Committee on Unemployment. Economic growth, equal opportunity research*. Springfield, 1963. 217 p.
31. Ingram, Fred J. *What makes education vocational?* *Journal of the American School Board* 133(5):31-36. 1956.
32. Ivins, Wilson H. and William B. Runge. *Work experience in high school*. New York, Ronald, 1951. 507 p.
33. Keller, Franklin J. *The double purpose high school: closing the gap between vocational and academic preparation*. New York, Harpers, 1953. 207 p.

34. Keppel, Francis. New perspectives. *School Shop* 23(8):3. 1964.
35. Klamath County School District. Klamath County study. Klamath Falls, Oregon, 1966. 186 p.
36. Little, Kenneth J. Wisconsin research center for vocational technical education. *Phi Delta Kappan* 46(8):42-46. 1965.
37. McCann, Matthew R. Fitchburg plan of cooperative industrial education. Washington, D. C., 1913. 28 p. (U. S. Bureau of Education. Bulletin no. 50)
38. Martin, Marie Young. An evaluation of the work experience program in the Los Angeles city high schools. Ph. D. thesis. Los Angeles, University of Southern California, 1954. 406 numb. leaves.
39. Mason, Ralph E. and Peter G. Haines. Cooperative office education. Danville, Illinois, Interstate, 1965. 519 p.
40. Nerden, Joseph T. Vocational education for a dynamic economy. *Bulletin of the National Association of Secondary School Principals* 49(301):8-14. 1965.
41. New York. State University. State Education Dept. Cooperative work experience manual for business and distributive education. Albany, 1965. 84 p.
42. Oregon. State Dept. of Education. Division of Education Development. Vocational education. [Salem], 1965. 15 p.
43. Oregon. State Dept. of Education. Coop program the common bond, ed. by William G. Loomis. Salem, 1967. 80 p.
44. _____ Guide to structure and articulation of occupational education programs, ed. by Robert Hatton and William Loomis. Salem, 1968. 93 p.
45. _____ Jackson County schools vocational education research project. Salem, 1966. 182 p.
46. _____ Laws relating to the Oregon public school system. Salem, 1966. 1060 p.

47. Oregon. State Dept. of Education. Opportunities and needs of the Malheur area. Salem, 1966. 284 p.
48. _____ Oregon State plan for vocational education. Salem, 1965. 146 p.
49. _____ Use of the lay advisory committee. Salem, 1965. 4 sheets. (Unpublished bulletin)
50. Parnell, Dale and Charles Smith. Job cluster curriculum: a blueprint for technical-vocational education in Lane County, Oregon. Eugene, Oregon, Lane County Intermediate District Board of Education, 1965. 65 p.
51. President's Committee on Youth Employment. The challenge of jobless youth, ed. by James B. Conant. Washington, D. C., U. S. Government Printing Office, 1963. 20 p.
52. Prosser, Charles and Thomas Quigley. Vocational education in a democracy. Rev. ed. Chicago, American Technical Society, 1950. 575 p.
53. Schmaelzle, Otto I. How a work experience program works. California Journal of Secondary Education 24:168-171. March, 1949.
54. Shibata, Kenneth E. A program to determine education needs in the field of vocational education in local school districts. Ph.D. thesis. Lincoln, University of Nebraska Teacher's College, 1965. 341 numb. leaves. (Microfilm)
55. Smith, Harold T. Education and training for the world of work: a vocational education program for the state of Michigan. Kalamazoo, Michigan, The W. E. Upjohn Institute for Employment Research, 1963. 165 p.
56. Springfield Public Schools. Springfield Public Schools policy handbook. Springfield, Oregon, 1966. 54 p.
57. Stiles, Lindley. The development of work experience education in the United States. Paper read before personnel of the Kansas City Public Schools, Kansas City, Missouri, April 15, 1965.
58. Texas. Education Dept. Guide for cooperative education. Austin, 1966. 81 p.

59. Tyler, Henry T. Report of the study of work experience programs in California high schools and junior colleges. Sacramento, California Department of Education, 1955. 204 p.
60. Ulich, Robert. Three thousand years of educational wisdom. 2d ed. Cambridge, Massachusetts, Harvard University, 1959. 667 p.
61. U. S. Department of Health, Education and Welfare. Education for a changing world of work: report of the panel of consultants on vocational education. Washington, D. C., 1963. 265 p. (OE 80021)
62. U. S. Department of Labor. Occupational outlook handbook. Washington, D. C., 1964. 67 p.
63. Venn, Grant. Man, education and work. 2d ed. Washington, D. C., American Council on Education, 1964. 184 p.
64. Walsh, John Patrick and William Selden. Vocational education in the secondary school. In: Vocational education, the 64th yearbook of the National Society for the Study of Education, ed. by Melvin L. Barlow. Chicago, National Society for the Study of Education, 1965. p. 88-134.
65. Young, Robert W. The academic Mohammed and the vocational mountain. School Shop News 24(2):27-28. 1964.

APPENDICES

APPENDIX A

QUESTIONNAIRES AND RELATED INSTRUMENTS

Letter explaining study to be
sent to Administrators of Districts
asked to participate in this study

Dear

In partial fulfillment of the requirements for the degree of Doctor of Education from Oregon State University, Corvallis, Oregon, I am conducting a survey of Cooperative Work Experience Programs in the State of Oregon. I respectfully request permission to ask Administrators, Coordinators and Students enrolled in Cooperative Work Experience Programs in your district if they would be willing to cooperate in the survey.

This study is based on the following assumptions:

1. There is increasing interest among educators in expanding and broadening the offerings in vocational education in secondary schools across the nation.
2. Cooperative work experience programs are an integral part of all vocational education programs.
3. There is a considerable amount of current information regarding planning, organizing and implementing and evaluating cooperative work experience programs as a part of the regular secondary school curriculum that could be surveyed and a composite program consisting of the strengths of many programs synthesized.
4. There are many school systems in the State of Oregon and other areas which are operating cooperative work experience programs.

The Intent of this Study:

This study proposes to survey cooperative work experience programs now in operation in selected Oregon School Districts in the State of Oregon and other areas and to assemble data on the organization, financing, staffing, implementation and evaluative processes currently being used in these programs.

A survey of guidelines, formats and status reports of cooperative work experience programs in other states will be conducted by mail and the results studied and charts constructed as well as narrative reports written about all innovative, experimental or unique approaches to cooperative work experience being used in other states.

The Organizational Plan for this Study:

1. A series of questionnaires have been developed, tested and modified in a Pilot Study conducted December, 1965, in the Springfield Public Schools. Questionnaires will be given to administrators, coordinators and students enrolled in cooperative work programs.
2. Schools or students need not be identified by name.
3. Director of Study will visit with administrators and coordinators to answer any questions concerning end product of study and use of data collected.

Please find enclosed sample copies of the questionnaires. Tests indicate it takes approximately forty-five minutes of class time to complete the student questionnaire.

I would be very grateful if you will grant me permission to contact High School Principals and Work Coordinators to solicit their cooperation in this study.

Respectfully,

Charles E. Smith

CES:mpl

Encls.

SPECIMEN COPY

Information to be presented to
Students involved in the
COOPERATIVE WORK EXPERIENCE PROGRAM
who are asked to complete the questionnaire

EXPLANATION TO STUDENTS:

Students asked to cooperate in the study should be told:

- A. The intent of this survey is to study the activities, procedures and instructional organization of Cooperative Work Experience Programs in the State of Oregon.
- B. Students will be asked to express their reactions to different phases of the program in which they are enrolled.
- C. Students should be informed that their sincere responses to the items could be of real value to educators in attempting to establish effective vocational programs for non-college youth.
- D. Students should be assured their comments are confidential, inasmuch as we will not connect names and comments. In fact the students should be told that we do not need to know their names for the purpose of the study.

SPECIMEN COPY
STUDENT QUESTIONNAIRE

Section I - Current Status

Question No. 1 (Please check)

What type of cooperative work experience program are you enrolled in at the present time?

- Distributive Education
- Vocational Agriculture
- Vocational Homemaking
- Commercial or Office Education
- Diversified Occupation
- (Other) _____

2. What type of work are you doing in connection with this program? _____

Section II - Opinions and Attitudes

Question No. 1: (Please check the most acceptable answer)

What reasons did you have for enrolling for Cooperative Work Experience Program?

- Wanted to learn something that I could use to get a job.
- Friend talked me into it.
- Counselor suggested I might profit from the course.
- I knew the coordinator and thought the program must be pretty good.
- Parents advised me to enroll.
- My (friend) (relative) was in the program and told me about it.
- Couldn't think of anything else to take.
- It was an opportunity to make money and I needed money.

I plan to go into this type of work for a career. This is part of my educational training.

(Other) _____
(Other) _____

2. What is your opinion of cooperative work experience program? (Please check)

- Worthwhile
- All right
- Acceptable
- Don't like it
- No opinion
- (Other) _____

3. What was your first reaction to the program? (Please check)

- Good idea.
- Wait and see what I think of it.
- Didn't want to take part.
- (Other) _____
- (Other) _____

4. Have your attitudes or feelings toward this program changed since you started working?

- Yes, I like it much better.
- I think it is good and enjoy working.
- I am working for the money, that's all!
- No, I liked it when I started; I still do.
- I think it is a waste of taxpayer's money.
- No, I didn't like it when I started and I still don't.
- (Other) _____

5. Do you have many friends working in the program?

- Yes
- No

6. How do you think your friends feel about this program?

- Think it is a good program.
- Think it has some value.
- Think it is a waste of time.
- I don't know how they feel; they haven't discussed this program with me.
- (Other) _____

7. How do your parents feel about this program?

- Approve of it.
- Encouraged me to select this program.
- Did not approve.
- Think it is O. K. for a course but do not want me to plan to work after graduation. They want me to go to college.
- (Other) _____

8. What do you think about the job you have?

- I like it.
- It is O. K.
- I think it is a good opportunity to learn about business and working.
- I don't understand what they want me to do.
- I don't care either way. I don't like it, I don't dislike it.
- I think it is interesting. I am learning quite a few things.
- They expect too much of me.
- I don't mind the work. I just don't like them controlling my time.
- Some days it is great; other days it is not so good.
- I have been switched from job to job so much I don't think I could answer the question.
- Job's O. K. ; hours are bad.
- (Other) _____

9. What do you think of your boss?

- O. K.
- Tries to be a good boss.
- I think he has taught me a lot.
- I don't like him.
- I have had so many, I don't think I could answer the question.
- Didn't like him at first, but after I got to know him I think he is pretty good.
- I really like him; he is a fine person.
- Too demanding.
- Just a boss, don't think much either way.
- He doesn't like me.
- (Other) _____

10. What suggestions could you offer to improve the program?

- A. Concerning Supervision _____

- B. Scheduling _____

- C. Credit _____

- D. Admission to the Program _____

- E. Other _____

Section III - School Activities

1. Are you taking part in any of the school sponsored activities, such as: (Please check)

Drama	Yes	No	Athletics	Yes	No
Music	Yes	No	Pep Club	Yes	No
Future Homemakers	Yes	No	Future Farmers	Yes	No

Please list any others:

1. _____
2. _____
3. _____

2. Did you take part in these same activities last year? Yes No
3. Do you think school activities are worth what they cost in time and effort? Yes No
4. Does the time spent working in the cooperative work program eliminate you from taking part in as many school activities as you would like? Yes No
5. Do you think taking part in school activities is a good way to make new friends?
 Yes No

Section IV - Basic Data

1. What do you plan to do when you leave this program (or graduate)? (Please check)

a. Attend a four year college	e. Get married
b. Attend a community college	f. _____
c. Go directly to full time work	g. _____
d. Go in service	h. _____
2. What kind of work do your parents do?
A. Father _____ B. Mother _____
3. Were you born in Oregon? Yes _____ No _____
4. If answer to above is "no" - How long have you lived in Oregon _____
5. What school subjects do you like best? (Please check)

A. English	I. Drafting
B. Music	J. Woodshop
C. Science	K. Auto or Power Mechanics
D. Shop	L. Electronics
E. Home Economics	M. Art
F. Business Education	N. General Metals or Machine Shop
G. Mathematics	O. Physical Education & Health
H. Agriculture	P. Distributive Education
	Q. Social Studies

6. Do you think participation in the Cooperative Work Program has affected your attendance and grades? Yes _____ No _____

If answer to No. 6 is yes -- in what way? Better _____ Worse _____

7. Have you decided on a future occupation? Yes _____ No _____

If answer is yes to No. 7 -- what occupation do you plan to follow: (Please check)

- A. Professional Career (4 yr. College - i. e. Law, education, Medicine, Clergy, etc.)
- B. Agricultural Field
- C. Military Career
- D. Business or Sales
- E. Office of Clerical
- F. Craftsman or Skilled Tradesman
- G. Service Occupations - i. e. (Police, Fireman, Domestic service, Practical Nurse, Custodian, X-ray Technician, Dental Aide, etc.)
- H. Logger or Forester
- I. Millwright, Machinist, Welder
- J. Auto Mechanics or related field
- K. Building Trades - i. e. (Carpenter, Brick Layer, Electrician, Plumber, Draftsman, etc.)
- L. Housewife
- M. Road Construction or General Contracting
- N. Art, Photography or related industry
- O. Transportation Industry - i. e. (Railroads, Trucking Industry, Marine Occupation, Airlines, etc.)
- P. Electronics
- Q. Public Communication Industry - I. e. (Radio, Newspaper, T. V.)
- R. Other _____

SPECIMEN COPY
COORDINATORS QUESTIONNAIRE

Section I - Basic Data

1. How long have you held your present position?
2. What is your title? (Please check)
 - a. Distributive Education Coordinator
 - b. Diversified Occupation Coordinator
 - c. Cooperative Education Supervisor
 - d. Work Experience Supervisor
 - e. (Other) _____
3. What is the length of your contract? _____ months
4. What are your teaching norms?
 - a. _____
 - b. _____
 - c. _____
5. Please list your personal industrial or business work experience.

<u>Occupation</u>	<u>Length of Service</u>
a. _____	_____
b. _____	_____
c. _____	_____
6. Do you presently hold (or have held) a valid labor union membership card? Yes _____ No _____
7. How many years have you worked as coordinator or supervisor? _____ years
8. Do you teach the related classroom instructional program of the cooperative education program? Yes _____ No _____
9. If the answer to No. 8 is no, do you have time provided for consultation and conferences with the instructor teaching the related classroom instruction part of the cooperative program? Yes _____ No _____
10. Do you plan to continue to work in this area? Yes _____ No _____

11. Do you belong to and participate in related professional associations, such as:
 - A, V, A.
 - Industrial Arts Teachers Assn.
 - Others _____

Section II - Instructional Activities

1. Is there written Admission Criteria for student admission to the cooperative program? Yes _____ No _____
2. If the answer to No. 1 is yes, Who establishes the criteria? _____

 Who screens the applicants? _____

 When is the screening done? _____

3. Have you established a written criteria or policy statement concerning requirements for Work Training Stations? Yes _____ No _____
4. If the answer to No. 3 is Yes, are these requirements enforced? Yes _____ No _____
5. Who establishes the criteria or requirements for a work training station? _____
6. Do you meet with employers and employer representatives to discuss the role of the work training station? Yes _____ No _____
7. Do you use established Lay Advisory Committees to evaluate the: (Please check)
 - A. Related classroom instruction
 - B. Criteria for student admission
 - C. Requirements for Work Training Stations

8. Are qualified Work Training Stations available in adequate numbers?
Yes _____ No _____
9. Are you expected to work summers?
Yes _____ No _____
- If the answer to No. 9 is yes, what are your chief duties during the summer months? (Please check)
- Contact local industry and business to line up work training stations.
 - Screening prospective enrollees.
 - Visit with students and employers working in the cooperative program during the summer months.
 - Work on curriculum, evaluation and modification.
 - College attendance.
 - Summer workshops.
 - (Other) _____
10. Are you expected to represent your district in explaining and "selling" the cooperative program to your community? Yes _____ No _____
11. Does the district have any policies regarding: (Please check)
- Pay for students
 - Awarding academic credit
 - Maximum or minimum working hours
 - Released school time for work
- (If answers to any of the above is yes please attach a copy of policies to this form)
2. Could you explain why? _____ If so, please list reason below. _____

3. Could you list any general changes in the attitude of students regarding this program that you have observed? (If "yes" please list below) Yes ___ No ___
- _____
 - _____
 - _____
4. Do you have any opinions or suggestions that should be considered to improve the program? If so, please list: _____

5. Do you think this program should be continued? Yes _____ No _____
Why? _____

6. In your opinion are the physical facilities adequate for the present program?
Yes _____ No _____
7. Do you feel you have an adequate amount of time allocated for work coordination and on job supervision?
Yes _____ No _____

Section III - Attitudes and Opinions

1. What is your personal attitude toward this program? (Check one)
- | | |
|--------------|-----------------|
| Enthusiastic | Rather doubtful |
| Optimistic | Pessimistic |

SCHOOL ADMINISTRATOR QUESTIONNAIRE

I. Basic Data:

1. School District _____
2. School _____
3. Principal _____
4. Coordinator charged with responsibility for this program _____
5. No. of enrollees involved in the Cooperative Work Experience Program in your school.
_____ Boys _____ Girls
6. No. of Coordinators required _____

II. Opinion Survey:

1. Is this program, in your opinion, of real value to your institution?
Yes _____ No _____

Could you please check typical firms, or businesses, or industries where Cooperative Work Experience program students are placed?

1. Retail Stores (Departments)
2. Service Stations
3. Grocery Stores
4. Garages
5. Appliance Stores
6. Machine Shops
7. Industrial Manufacturing Plants
8. Custodial Care Institutions
9. _____
10. _____

(use other side of paper if more room is needed)

2. Is on-the-job supervision a problem?
Yes _____ No _____

If the answer is "yes" would you state why?

3. Do you feel that this program is of value to the students involved?
Yes _____ No _____

4. Is your school willing to continue to offer Cooperative Work Experience Programs as a permanent part of the school curriculum?
Yes _____ No _____

5. Do you plan to expand the present program? Yes _____ No _____

If answer to No. 5 is "yes", in what areas?

- | | Yes | No |
|-------------------------------|-------|-------|
| a. Distributive Education | _____ | _____ |
| b. Trade and Industry Courses | _____ | _____ |
| c. Vocational Home-making | _____ | _____ |
| d. Health or Service Areas | _____ | _____ |
| e. Vocational Agriculture | _____ | _____ |
| f. Office Education | _____ | _____ |

6. Do you have any cost figures available that indicate what this program costs as compared to regular academic classes?
Yes _____ No _____
7. If answer to 6 is "yes", what are the cost figures per year for Cooperative Work Experience enrollee? _____
8. What are the costs for regular academic enrollees per year? _____
9. Could you make any suggestions to administrators considering a cooperative work experience regarding financing and budgeting? (If so please list on reverse of this sheet.)
10. What type of time schedule is provided for cooperative work program enrollees? (Please check)
 - A. No released time.
 - B. One half day released time.
 - C. No set pattern. Student released as recommended by work coordinator.
 - D. _____
 - E. _____

11. Do you have written policy concerning student criteria for admission to program? Yes _____ No _____
- If answer is Yes, would you please attach a copy of the admission criteria?
12. Is student class scheduling for Cooperative Work Experience Programs a problem? Yes _____ No _____
- If answer is yes, please indicate problems on back of page.
13. Is academic credit awarded for Cooperative Work Experience? Yes _____ No _____
- If answer is yes, what formula or procedure do you use? (Please check)
- a. One hour academic credit for 15 hours per week on job training.
 - b. _____
 - c. _____
14. Is the Work Coordinator on extended contract? Yes _____ No _____
- If the answer is yes, how many months? _____ months
15. Do you use a lay advisory council to advise you and your staff concerning Vocational Education Program? Yes _____ No _____
16. Do you have a written criteria for Work Training Stations in the community? Yes _____ No _____
17. Do you reimburse employers for providing work training stations? Yes _____ No _____
18. If answer is yes, how much do you pay employers, per training station?

APPENDIX B

TABLES

Compilation Tables - Principals Response

Table 27. Basic Information

Number of enrollees	613
Number of coordinators	27

Table 28. Principals opinions of value of program

Is this program of value?	Yes - 18	No - 3
---------------------------	----------	--------

Table 29. Kinds of work training stations

Stations	Number
Retail Stores	20
Service Stations	11
Grocery Stores	17
Garages	6
Machine Shops	3
Industrial Manufacturing Firms	4
Restaurants	19
Custodial Care	4
Agricultural Industries	6
Food Processing	8
Forest Products	3
Soft Drink Bottlers	2
Florists	2
Dairy Processing	2
Candlemaker	1

Table 30. Costs of cooperative education

Response	Number
About the same	14
\$150.00 per year per student more	2
\$250.00 per year per student more	1
Above \$250.00 per year more	1
Not available	2

Table 31. Released time for cooperative education students

Response	Number
No released time	0
Two periods per day	16
One half day	2
No set pattern	2

Table 32. Awarding credit for participant in cooperative education

Response	Number
One hour credit for fifteen hours work	17
Two hours credit for fifteen hours work	2
No credit	1

Table 33. Reimbursing employers for providing cooperative education training stations

Item	Response	
Do you reimburse employers for Work Training Stations?	Yes - 1	No - 19

Compilation Tables - Coordinators Responses

Table 34. Coordinators years experience

	1	2	3	4	5	6	7	8	9	over 10
Length of time in present position. (In years)	4	0	5	4	0	2	0	4	0	5

Table 35. Construction teaching field

Title	No. Responding
Distributive Education Coordinator	12
Diversified Occupation Coordinator	3
Cooperative Office Education Supervisor	5
Work Experience Supervisor	2
Vocational Agriculture Supervisor	2

Table 36. Length of contract

	9 mo.	9.5 mo.	12 mo.
Length of contract	4	17	3

Table 37. Coordinators teaching norms

	Number
Distributive Education	12
Vocational Agriculture	3
Office Education	4
Other	5

Table 38. Coordinators previous occupational experience*

Occupation	Number
Sales	20
Businessmen	4
Service (Military)	3
Farmer	5
Automotive Service	8
Welder or Machinist	2
Building Trades	9
Electronics	2

*Some coordinators listed more than one previous occupation.

Table 39. Coordinators labor union membership

Do you presently hold (or have held) a valid labor union membership card?	Yes - 14	No - 13
---	----------	---------

Table 40. Related classroom assignments

Do you teach the related classroom instructional program of the cooperative education program?	Yes - 24	No - 0
--	----------	--------

Table 41. Coordinators future plans

Do you plan to continue to work in this area?	Yes - 21	No - 3
---	----------	--------

Table 42. Written admission policy

Is there written admission criteria for student admission to the cooperative program?	Yes - 24	No - 0
---	----------	--------

Table 43. Written criteria concerning training stations

Have you established a written criteria or policy statement concerning requirements for work training stations?	Yes - 5	No - 19
---	---------	---------

Table 44. Uses of lay advisory committees

Use	Number of Schools
Assist in planning related classroom instruction	14
Establishing criteria for admission to program	13
Developing grading practices and awarding of credits	2
Setting up requirements for work training station	12

Table 45. Availability of work training stations

Are qualified work training stations available in adequate numbers?	Yes - 16	No - 8
---	----------	--------

Table 46. Summer activity for coordinators*

Activities	Number
Contact local industry and business to line up work training stations	14
Screening prospective enrollees	12
Visit with students and employers working in the cooperative program during the summer months	4
Work on curriculum, evaluation and modification	13
College attendance	6
Summer workshops	17

*Many coordinators responded to more than one item on this question.

Table 47. District written policies for operation of program

Written Policies	Number
Pay for students	13
Awarding academic credit	18
Maximum or minimum working hours	20
Released school time for work	19
Grade requirements for continuation in program	12

Table 48. Coordinators' attitude toward program

Reaction	Number
Enthusiastic	16
Optimistic	7
Concerned	1
Pessimistic	1

Table 49. Number of students involved in survey

Number of students surveyed	613
Number of schools in survey	20
Number of student responses	82
Number of principal responses	20
Number of coordinator responses	24

Compilation Tables - Student Responses

Section I.

Table 50. Cooperative education program

Area	No. Enrolled
Distributive education	283
Vocational agriculture	43
Vocational homemaking	0
Commercial of office education	113
Diversified occupation	39
Other	4
Total	482

Section II.

Table 51. Reasons for enrolling in cooperative education programs

Wanted to learn something that I could use to get a job	84
Friend talked me into it	30
Counselor suggested I might profit from the course	51
I knew the coordinator and thought the program must be pretty good	25
Parents advised me to enroll	29
My (friend) (relative) was in the program and told me about it	39
Couldn't think of anything else to take	35
It was an opportunity to make money and I needed money	55
I plan to go into this type of work for a career. This is part of my educational training	44
Employer talked me into it	4
Wanted to learn how to work	3
Wanted to get out of school	14

Table 52. What is your opinion of cooperative education program?

Opinion	Number
Worthwhile	231
All right	99
Acceptable	22
Don't like it	9
No opinion	17
Gives me confidence	2
Work O.K. Teacher boring	8

Table 53. What was your first reaction to the program?

	Number
Good idea	193
Wait and see what I think of it	129
Didn't want to take part	26
Indifferent	28
Expected more	12
Doubtful	10

Table 54. Change of attitude toward program

Have your attitudes or feeling toward this program changed since you started working?	Number
Yes, I like it much better	105
I think it is good and enjoy working	160
I am working for the money, that's all	56
No, I liked it when I started; I still do	97
I think it is a waste of taxpayer's money	2
No, I didn't like it when I started and I still don't	18
Excellent program	6
Disappointed	9

Table 55. Number of students who have friends working in program

Do you have many friends working in the program?	Yes - 354	No - 81
--	-----------	---------

Table 56. Opinions of friends reaction to program

How do you think your friends feel about this program?	Number
Think it is a good program	91
Think it has some value	166
Think it is a waste of time	72
I don't know how they feel; they haven't discussed this program with me	68
Most approve	5
Don't know anything about it	6

Table 57. Student opinions of parent reaction to program

How do your parents feel about this program?	
Approve of it	234
Encouraged me to select this program	81
Did not approve	13
Think it is O. K. for a course, but do not want me to plan to work after graduation; they want me to go to college	53
No comment	12
Agreed I could take it	2
Didn't like it at first	2
Don't know anything about it	14

Table 58. Student opinion of work training station

What do you think about the job you have?	Number of responses
I like it	77
It is O. K.	65
I think it is good opportunity to learn about business and working	67
I don't understand what they want me to do	2
I don't care either way. I don't like it, I don't dislike it	26
I think it is interesting. I am learning quite a few things	52
They expect too much of me	4
I don't mind the work. I just don't like them controlling my time	25
Some days it is great; other days it is not so good	50
I have been switched from job to job so much I don't think I could answer the question	19
Job's O. K. ; hours are bad	20
Doesn't relate to class work	2
Excellent situation	13

Table 59. Student opinion of employer

What do you think of your boss?	
O. K.	78
Tries to be a good boss	66
I think he has taught me a lot	84
I don't like him	19
I have had so many I don't think I could answer the question	10
Didn't like him at first, but after I got to know him I think he is pretty good	6
I really like him; he is a fine person	114
Too demanding	18
Just a boss, don't think much either way	6
He doesn't like me	10
Doesn't set a good example	3

Table 60. Participation in school activities

Are you taking part in any of the school sponsored activities such as:			
	Number		Number
Drama	37	Athletics	107
Music	13	Pep Club	21
Future homemakers	30	Future farmers	16
DECA	126	Speech	11
Future teachers	9	Miscellaneous clubs	17

Table 61. Opinion of value of school activities

Do you think school activities are worth what they cost in time and effort?	Yes - 272	No - 178
---	-----------	----------

Table 62. Opinion of time demands of cooperative education programs effort on participation in school activities

	Yes	No
Does the time spent working in the cooperative work program eliminate you from taking part in as many school activities as you would like?	158	262
Do you think taking part in school activities is a good way to make new friends?	299	49

Table 63. Opinion of participants in cooperative education program has in attendance and grades

	<u>Yes</u>	<u>No</u>
Do you think participation in the cooperative work program has affected your attendance and grades?	260	176
If answer is yes---in what way?	Better - 178	Worse - 82

Table 64. Respondents post high school plans

What do you plan to do when you leave this program (or graduate)?	Number of responses
Attend a four year college	81
Attend a community college	130
Go directly to full time work	61
Go in service	50
Get married	38
Don't know	31
Attend business school	21
Go to beauty college	15
Attend trade or technical school	5

Table 65. Respondents occupational chance

Have you decided on a future occupation?	Yes - 245	No - 170
If answer is yes, what occupation do you plan to follow?	Number	
Professional Career (4-yr. college, i. e. law, education, medicine, clergy, etc.)	50	
Agricultural Field	13	
Military Career	10	
Business or Sales	39	
Office or Clerical	18	
Craftsman or Skilled Tradesman	26	
Service Occupations, i. e. Police, Fireman, Domestic service, Practical Nurse, Custodian, X-ray Technician	13	
Logger or Forester	3	
Millwright, Machinist, Welder	6	
Auto Mechanics or Related Field	10	
Housewife	10	
Road Construction or General Contracting	0	
Art, Photography or related industry	15	
Transportation Industry - i. e. Railroads, trucking industry, marine occupation, airlines, etc.	13	
Electronics	1	
Public Communication Industry - i. e. Radio, newspaper, TV	2	
Banking	4	
Florist, Horticulture	1	
Data Processing	3	
Animal Husbandry	1	
Recreation	1	
Beutician	6	

Table 66. Number of respondents born in Oregon

Were you born in Oregon?	Yes - 315	No - 150
--------------------------	-----------	----------

Table 67. Respondents rating of school subjects in order of preference

What school subjects do you like best?	Number of responses
English	75
Music	8
Science	45
Shop	20
Home Economics	15
Business Education	33
Mathematics	33
Agriculture	16
Drafting	14
Woodshop	10
Auto or Power Mechanics	5
Electronics	8
Art	54
General Metals or Machine Shop	11
Physical Education and Health	43
Distributive Education	43
Social Studies	30

APPENDIX C.

LEGISLATION AND LAWS AFFECTING
WORK EXPERIENCE EDUCATION

Brief Survey of Laws Affecting Work Education Type Programs:

The employment of high school students in work experience education programs must conform to federal and state laws regarding the employment of minors. Educators should maintain standards of part-time programs in this respect as high as, or even higher, than those established by federal and state governments.

Child labor refers to the employment of boys or girls under the specific provisions of the Federal Fair Labor Standards Act or the corresponding State Child Labor Acts. "Oppressive" child labor refers to the violation of the acts. The acts do not apply to school activities or home duties, or chores.

The school administrator should familiarize himself with all laws both federal and state which pertain to the welfare of minors, and check each student and training station in his program to make sure that all such laws are observed. Among the many laws that he will have to familiarize himself with are: The child labor provisions of the "Fair Labor Standards Act", (The Federal Wage and Hour Law), "Oregon Workmen's Compensation Law", Federal "Social Security Law", and the Apprentice Training Service.

Since federal laws apply only to those engaged in the production of goods in interstate commerce and state laws apply to the production of goods in intrastate commerce, the school administrator should ascertain which laws apply in each specific case. Most of the time this information can be obtained from the employer who desires to participate in the part-time cooperative plan. The educator should ask the employer if he is engaged in interstate commerce. It is the responsibility of the program director to state to the employer the position of the school in relation to their student learners and the Fair Labor Standards Act. The educator should also bear in mind that national and state legislatures amend many of the laws each time they are in

session. For this reason, some of the information that is to be found in this report regarding these laws may soon be out-dated. School administrators should acquaint themselves with all changes in the laws pertaining to child labor as they occur. This information can be secured from the State Department of Labor and the State Department of Public Instruction, Division of Vocational Education. Parts of the child labor provisions of the Fair Labor Standards Act and State child labor laws most applicable to co-op on-the-job training are as follows:

UNITED STATES MINIMUM WAGE

The minimum wage is \$1.60 per hour for all workers except for industries in Puerto Rico and the Virgin Islands, if provided for under the Fair Labor Standards Act, time-and-a-half pay for overtime after forty hours except as otherwise specifically provided by the Act. For authority to employ at less than the minimum wage applicable under Section six of the Fair Labor Standards Act, for student-learner enrolled in a vocational training agency, the coordinator should fill out form "Application for a Special Student-Learner's Certificate for Employment Training", from the U. S. Department of Labor, Wage and Hour and Public Contracts Division, Washington, D. C., or nearest office.

SOCIAL SECURITY

The Social Security Act was born during the Great Depression at a time when ten million workers were without other employment other than work-relief, and when some eighteen million people were dependent for subsistence on relief. Of the several features of this act, only the Old Age and Survivors Insurance section will be treated here. Benefits from this act are financed by payroll deductions, at the present time. Earnings from the employee is matched by the employer. In 1966, deduction was at the rate of 4.2 per cent up to \$6,600 yearly earnings and matched by the employer. The deduction will increase to 4.9 percent in 1969. The coordinator should determine at the nearest local office of the Social Security Board what jobs are covered. The Student-Learner should be made aware of the disability benefits of the act. Changes are constantly being written into the act, and as this is being written Congress is considering additional changes. Any student embarking on his first job should secure a social security number through his local post office or the nearest office of the Social Security Board. He will carry this number throughout his life.

Further information may be obtained from the Social Security Office, Washington, D. C.

CHILD LABOR PROVISIONS OF THE FAIR LABOR STANDARDS ACT

"The child-labor provisions of the Fair Labor Standards Act apply to any employer who employs any minor in interstate or foreign commerce or in the production of goods for such commerce, and to any producer, manufacturer, or dealer who ships goods or delivers goods for shipment in interstate or foreign commerce. "

"The employment of any oppressive child labor in interstate or foreign commerce in the production of goods for such commerce is prohibited. The shipment or delivery for shipment, in interstate or foreign commerce, of goods produced in an establishment situated in the United States is also prohibited if within 30 days prior to the removal of such goods oppressive child labor has been employed in or about that establishment. "

"Employment of children under the minimum age act for various types or work by the act or by regulations issued under the act is defined as "Oppressive Child Labor." Employment includes, to suffer or permit to work. "

"An employer can protect himself from unintentional violation of the minimum-age provisions by obtaining and keeping on file an age or employment certificate for each minor employed, showing the minor to be of the age established for the occupation in which he is employed. Employers should obtain such a certificate and have it on file before the minor starts work. "

"Sixteen years for most; eighteen years for jobs declared particularly hazardous;" are the minimum ages for employment of student-learners by companies engaged in interstate commerce.

HAZARDOUS OCCUPATIONS

Hazardous-occupation orders are regulations issued by the Secretary of Labor declaring occupations to be particularly hazardous for minors. The effect of these orders is to raise the minimum age for employment to eighteen years in the occupation they declare hazardous. (Described on the following pages.) These orders are based on investigations or hazards made by the Bureau of Labor Standards, and are issued after public hearings have been held on proposed orders.

Information on the (interstate commerce) occupations now covered by hazardous--occupations orders, with the definitions used in the orders and with amendments and exemption, are as follows:

- (1) Manufacturing or Storage Occupations Involving Explosives-- This has to do with occupations in or about plants manufacturing explosives or articles containing explosives components.
- (2) Motor-Vehicle Occupations--the occupations of motor-vehicle driver and helper. (Full time occupational pursuit.)
- (3) Coal Mine Occupations--All occupations in or about any coal mine, except the occupation of slate or other refuse picking at a picking table or picking chute in a tippie or breaker and occupations requiring the performance of duties solely in offices or in repair or maintenance shops located the surface part of any coal-mining plant.
- (4) Logging and Sawmilling Occupations--All occupations in logging and all occupations in the operation of any sawmill, lath mill, shingle mill, or cooperage-stick mill.
- (5) Power-driven Woodworking Machine Occupations--The occupation of operating power-driven woodworking machines including the supervising or controlling the operation of such machines, feeding, setting up, adjusting repairing, oiling, or cleaning of power-driven woodworking machines.
 - a. Exemptions: This order shall not apply to the employment of student-learner in occupations herein declared particularly hazardous. Provided, however, that such a student-learner is enrolled in a course of study and training in a cooperative vocational training program under a recognized state or local educational authority or in a course of study in a substantially similar program conducted by a private school. Provided, further, that such student-learner be employed under a written agreement which shall provide:
 - (1) that the work of the hazardous shall be incidental to his training, shall be intermittent and for short periods of time, and shall be under the direct and close supervision of a qualified and experienced person;
 - (2) that safety instruction shall be given by the school and correlated by the employer with on-the-job training; and
 - (3) that a schedule of recognized and progressive work processes to be performed on the job shall have been prepared. Such a written agreement shall carry the name of the student-coordinator or principal. Copies of the agreement shall be kept on file by both the school and the employer. This

exemption for the employment of student-learners may be revoked in any individual situation wherein it is found that reasonable precautions have not been observed for the safety of minors employed thereunder.

(6) Occupations Involving Exposure to Radioactive Substance and to Ionizing Radiations.

(7) Power-Driven Hoisting Apparatus Occupations--Involves the operation of elevators, crane, derrick, hoist, highlift truck riding on a manlift or freight elevator or as an assistant in the operation of a crane, derrick, or hoist.

(8) Power-Driven Metal Forming, Punching, and Shearing Machine Occupations--The occupations of operator of, or helper on the following machines is covered by this order: rolling machines, pressing or punching machines, bending machines, hammering machines and shearing machines.

a. Exemptions: Student-learner enrolled in a course of study and training in a cooperative vocational training program under a recognized State or Local educational authority are exempted. (See order "5a" on the preceding page.)

(9) Occupations in connection with mining, other than coal.

(10) Slaughtering, Meat Packing and Rendering Plant Occupations.

(11) Power-driven Bakery Machines--This order covers the operation of or the assistance in the operating of wire stretchers, staplers, circular or band saw, corner cutter or mitering machine, corrugation and single or double-facing machine, die cutting, guillotine paper cutter or shear, horizontal bar scorer, scrap paper baler, laminating machine, platen die cutting press, or punch press.

a. Exemptions: Student-learners enrolled in a course of study and training in a cooperative vocational training program under a recognized State or Local educational authority are exempted. (See order "5 a) on the preceding page.)

(12) Occupations Involved in the Manufacture of Brick, Tile and Kindred Products.

(13) Occupations Involved in the Operation of Circular Saws, Band Saws, and Guillotine Shears. An extension of previous orders pertaining to wood and paper to all occupations

regardless of material being cut. Includes meat-cutting. (See order "5 a" on preceding pages.)

(14) Occupations involved in wrecking, demolition and ship-breaking operations. Order pertains to all operations including clean up and salvage performed at the site of partial or total razing, demolishing or dismantling. No exemptions provision to apprentices or student-learners.

(15) Occupations involved in roofing operations. (See order "5 a" on the preceding page.)

(16) Hazardous Occupations--Excavation (See order "5 a" on the preceding page.)

Sources of information concerning laws and regulations concerning legal responsibilities involved in the operation of a Work Experience Education Program as listed by the State Department of Public Instruction, Division of Vocational Education, Salem, Oregon:

1. Child-Labor Provisions of the Fair Labor Standards Act (the federal wage and hour law) Questions and answers on child labor, information about age certificates, and analysis of hazardous occupations orders.
2. Digest of the Oregon Labor Laws contains summary of Oregon child labor laws and selected child labor provisions of the Fair Labor Standards Act.
3. Handbook for Teen Wage Earners - Oregon Bureau of Labor Provides information about principle regulations governing jobs for minors under eighteen and the system of work permits.
4. Your Social Security - Old-age and Survivors Insurance Under the Social Security Act summary of provisions of the Social Security Act.

INSURANCE PROTECTION AGAINST ACCIDENT AND INJURY

Students enrolled in a cooperative work experience education program must have adequate insurance protection against accident and injury. It is equally important that the school operating a program and the employee of a student trainee be protected against claims which may result from possible injury. To provide the necessary

protection for all parties concerned, all students trainees should be covered under the provisions of the Oregon Workman's Compensation Law as ammended in 1965.

APPENDIX D

SAMPLE FORMS USED IN COOPERATIVE
EDUCATION PROGRAMS

SAMPLE
TRAINING AGREEMENT

Student's Name _____ Birth Date _____ Age _____
 Student's Address _____ Telephone _____
 Name of School _____ Telephone _____
 Name of Training Station _____ Telephone _____
 Address of Training Station _____
 Name of Training Sponsor _____ Position _____
 Dates of Training Period: From _____ To _____
 Avg. No. of hours to be worked by the Student-Learner: Per Day _____ Per Week _____
 Student-Learner's rate of pay _____ Career Objective _____

Brief outline of major areas of related instruction to be provided in class:

Brief outline of experience and training to be provided at training station:

Responsibilities of the student-learner:

1. The student-learner will keep regular attendance, both in school and on the job, and cannot work on any school day that he fails to attend school; he will notify the school and employer if he is unable to report.
2. The student-learner's employment will be terminated if he does not remain in school.
3. The student-learner will show honesty, punctuality, courtesy, a cooperative attitude, proper health and grooming habits, good dress and a willingness to learn.
4. The student-learner will consult the coordinating teacher about any difficulties arising at the training station.
5. The student-learner will conform to the rules and regulations of the training station.
6. The student-learner will furnish the coordinating teacher with all necessary information and complete all necessary reports.

Responsibilities of the Parents:

1. The parents will encourage the student-learner to effectively carry out his duties and responsibilities.
2. The parents will share the responsibility for the conduct of the student-learner while training in the program.
3. The parents will be responsible for the safety and conduct of the student-learner while he is traveling to and from the school, the training station, and home.

Responsibilities of the Training Sponsor:

1. The sponsor will endeavor to employ the student-learner for at least the minimum number of hours each day and each week for the entire agreed training period,

2. The sponsor will adhere to all Federal and State regulations regarding employment, child labor laws, minimum wages, and other applicable regulations.
3. The sponsor will see that the student-learner is not allowed to remain in any one operation, job, or phase of the occupation beyond the period of time where such experience is of educational value.
4. The sponsor will consult the coordinating teacher about any difficulties arising at the training station.
5. The sponsor will provide experiences for the student-learner that will contribute to the attainment of the career objective.
6. The sponsor will assist in the evaluation of the student-learner.
7. The sponsor will provide time for consultation with the coordinating teacher concerning the student-learner.
8. The sponsor will provide instructional material and occupational guidance for the student-learner as needed and available.

Your High School
City, Oregon Zip Code

COMMUNITY SURVEY
Work Experience Education Program

The (name) high School is considering beginning a work experience education program in which students are placed part time in business or industrial establishments for on-the-job training, for which they receive school credit. Your answers to the following questions will help the school to determine the need for such a program in (city). All information will be held in strict confidence.

Name of firm _____ Phone _____ Address _____

Type of Business _____ Business hours _____

Name of person
completing questionnaire _____ Position _____

1. Approximately how many high school students does your firm now employ:
Male _____ Female _____
2. Approximately how many full-time employees does your firm employ?
Male _____ Female _____
3. What is the union status of your firm's employees? (Check the one that applies.)
Nonunion () Voluntary union () Compulsory union ()
4. Are temporary workers employed by your firm during any of the following times? (Check those that apply.)
Christmas () Summer () Weekends () Other times ()
5. What are your sources for the recruitment of new employees? (Check those that apply.)
High School placement service ()
Voluntary applications ()
Other (specify) () _____
6. Which of the following are characteristic of your beginning, inexperienced employees? (Check those that apply.)
Ability to express themselves well () Responsibility and punctuality ()
Ability to spell correctly () Ability to follow directions ()
Good knowledge of business arithmetic () Ability to meet the public ()
Initiative () Ability to get along with fellow workers ()
7. Do you think a program designed to give students on-the-job training would be of value to the following? (Check those that apply.)
Your city students: Yes () No () Undecided ()
Your city employers: Yes () No () Undecided ()
The whole community: Yes () No () Undecided ()
8. Would your firm be interested in cooperating with the school in providing on-the-job training for interested and capable students? (Check those that apply.)
Interested () Undecided ()
Want more information () Not interested ()

Your High School

STUDENT INTEREST SURVEY
Work Experience Education Program

Name of student _____ Date _____

Study major _____ Year _____

I am employed part time: Yes _____ No _____

Occupation _____

Name of employer _____

Address of employer _____

I am currently working, but I am interested in work experience
education:

Yes _____ No _____

I am working and feel I would benefit from classroom training that
would help me do a better job:

Yes _____ No _____

I am undecided. Please give me additional information:

Yes _____ No _____

Signature _____

JOB INVENTORY
Work Experience Education Program

Name of person who will interview _____ Date _____

Name of firm _____

Address _____ Phone _____

Name of specific job _____

Duties and responsibilities _____

Special abilities _____

Special clothing _____

Union: Yes _____ No _____ Business Agent _____

Name of union _____ Local No. _____

Address _____

Prefer boy or girl _____ Job future _____

Employment hours: From _____ to _____ Sat. _____

Holidays _____

Wages _____ Best time for interview _____

Students sent for interview:

_____ School _____ Date _____ Time _____

Successful candidate _____

Date started to work _____

Outcome _____

EMPLOYER'S RATING OF WORK PERFORMANCE
Work Experience Education Program

Trainee's Name _____ Office _____
 Employer _____ Date _____
 Company _____ From _____ to _____

Your constructive criticism enables us to provide better instructional training. Please evaluate the following traits of the above-named trainee by circling: (0) unsatisfactory; (1) poor; (2) good; or (3) excellent.

Personal traits

Grooming	0	1	2	3
Suitability of dress	0	1	2	3
Personal hygiene	0	1	2	3
deportment	0	1	2	3
Speech	0	1	2	3
Interest in work	0	1	2	3
Cooperation	0	1	2	3
Initiative	0	1	2	3
Adaptability	0	1	2	3
Ambition	0	1	2	3
Tact	0	1	2	3

Skill in

Typing	0	1	2	3
Shorthand	0	1	2	3
Transcription	0	1	2	3
Filing	0	1	2	3
Grammar	0	1	2	3
Mathematics	0	1	2	3
Spelling	0	1	2	3
Punctuation and capitilization	0	1	2	3
Proofreading	0	1	2	3
Office machines	0	1	2	3

Ability to

Understand instructions	0	1	2	3
Follow directions	0	1	2	3
Attend to details	0	1	2	3
Keep on the job	0	1	2	3
Take criticism	0	1	2	3

Business techniques

Meeting people	0	1	2	3
Use of telephone	0	1	2	3
Use of sources of information	0	1	2	3
Use of supplies	0	1	2	3
Office house- keeping	0	1	2	3

General rating of trainee (Please circle one): 0 1 2 3

Please list any points that should be emphasized in his training:

1. _____
2. _____
3. _____

Do you wish trainee to see this report?

Yes _____ No _____

(Employer's signature)

APPENDIX E

GLOSSARY OF TERMS USED IN
COOPERATIVE EDUCATION

GLOSSARY OF TERMS USED IN
TECHNICAL-VOCATIONAL EDUCATION

(Adapted from publication "Definitions"
Published by American Vocational Association, Inc.
Washington, D. C.)

ADULT VOCATIONAL EDUCATION - Instruction offered day or evening to adults or out-of-school youth over 16 years of age who are engaged in or are preparing to enter an occupation. Vocational education for adults is chiefly of an upgrading and updating nature, offered on a part-time basis, or of a retraining nature for persons displaced by automation or technological changes.

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 the vocational program is concerned.

APPLIED ART - An area of study dealing with the principles of art as related to the planning, designing, manufacturing, or arrangement of such commodities as clothing, shelter, household furniture and equipment.

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 experiences and the related information in the classroom. The minimum terms and conditions of apprenticeship are regulated by state and local statutes or agreements.

AREA VOCATIONAL SCHOOL OR PROGRAM - A school or program involving a large geographical territory usually including more than one local basic administrative unit. It offers specialized training to high school students, who are preparing to enter the labor market. It also provides vocational or technical education to persons who have completed or left high school and are available for full-time study. These schools are sponsored and operated by local communities or by the state.

AVOCATIONAL INTERESTS - Those pursuits or hobbies which are distinct from the regular work or occupations of the individual and which are followed for recreational purposes.

BUSINESS EDUCATION - A program on instruction which consists of two parts: (a) office education, a grading education leading to employability and advancement in office occupations, and (b) general business education, a program to provide students with information and competencies which are needed by all in managing personal business affairs and in using the services of the business world.

COMMUNITY COLLEGE - A junior college operated by the board of education of a local basic administrative unit (including the independent local board for one or more community colleges). Instruction is adapted in content, level, and schedule to the needs of the local community.

COURSE OF STUDY - An inclusive outline of the objectives, experiences, skills, projects, demonstrations, related information and methods involved in teaching a school subject, covering a specified period of time.

CURRICULUM - The series of courses designed to cover the instruction in a designated field. It may refer also to the whole body of courses offered in an educational institution.

DISTRIBUTIVE OCCUPATIONS - Those occupations followed by proprietors, managers, or employees engaged primarily in marketing or merchandising of goods or services. Such occupations are found in various business establishments, including, without being limited to, retailing, wholesaling, manufacturing, storing, transporting, financing, and risk bearing.

EVALUATION - A term used in education indicating the procedure for determining the effectiveness of instruction.

EXPLORATORY COURSES - School subjects designed to provide the student with a broad, general, over-all view of the knowledge and skills involved in a field of learning or an occupation. Courses which provide students with exploratory and introductory experiences in a wide range of occupations serve as aid in choosing a vocation.

GENERAL INDUSTRIAL COURSE - A class organized to give specific preparation for an occupation in a group where shop instruction in several closely allied trades is conducted simultaneously. Courses may be organized to give preparation for one or more production jobs that do not fall into the trade classification.

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.

HOME ECONOMICS - The term used to designate the discipline at the college level which prepares students for such professional fields as: home economics teaching, dietetics, cooperative extension, social welfare, public health, institution administration, research.

HOME ECONOMICS EDUCATION - A program of instruction which is planned for the purpose of assisting youth and adults to understand and solve problems in home and family living and/or to to prepare for employment and upgrading in occupations involving knowledge and skills in home economics subjects. Subject-matter areas include: Child development; family relationships; food and nutrition; clothing and textiles; family economics and home management; housing, home, furnishing, and equipment; and, family health.

HOMEMAKING EDUCATION - A term frequently used to designate secondary and adult programs which have as their goal education for home and family living. (see home economics education)

INDUSTRIAL ART - Application of the principles of design to the planning and production of manufactured products.

INDUSTRIAL ARTS EDUCATION - Instructional shopwork of a non-vocational type which provides general education experiences centered around the industrial and technical aspects of life today and offers orientation in the areas of appreciation, production, consumption, and recreation through actual experiences with materials and goods. It also serves as exploratory experiences which are helpful in the choice of a vocation.

INDUSTRIAL EDUCATION - A generic term applying to all types of education related to industry, including industrial arts education, vocational industrial education (trade and industrial education), and much technical education.

JOB ANALYSIS - A detailed listing of duties, operations, and skills necessary to perform a clearly defined, specific job, organized into a logical sequence which may be used for teaching, employment, or classification purposes.

OCCUPATIONAL INFORMATION - Systematically organized data used by guidance personnel for the purpose of helping persons make a vocational choice. Material concerns the nature of the work, duties, responsibilities, and compensations involved in the several vocations

including information about employment outlook, promotional opportunities, and entrance requirements.

OFFICE EDUCATION - A vocational education program for office careers through initial, refresher, and upgrading education leading to employability and advancement in office occupations.

OFFICE EDUCATION CURRICULA - A series of related and required courses leading to vocational competency in a specific occupational category which is taken in addition to the required subject matter taken by all students. Typical occupational curricula include; (a) stenographic, typing, filing, and related occupations, (b) computing and accounting occupations, (c) material and production and recording occupations, (d) information and message distribution occupations, (e) accounting, auditing, budget, and management analyst occupations, (f) personnel and training administrative occupation, (g) administrative specialization occupations, (i) supervisor office position occupations, (j) management office facilitation function, (k) data processing occupations.

OFFICE OCCUPATIONS - Those activities--performed by individuals in public and/or private enterprises--which are related to the facilitating function of the office. They include such items as recording and retrieval of data, supervision and coordination of office activities, communication, and reporting of information regardless of the social, economic or governmental organization in which they are found. The "Dictionary of Occupation Titles" provides a source of information concerning the nature of office occupations.

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 a minimum or beginning wage is paid.

PRACTICAL NURSE EDUCATION - A program offering training in approved schools and leading to licensure as a practical or vocational nurse. The trainee is being prepared to (a) give direct nursing care to patients whose health situation is relatively stable, (b) assist qualified professional nurses in caring for patients whose health situation is more complex. The minimum requirements are set by the state board for vocational education which it is accredited by the profession for meeting desirable standards and licensed by the state in order to protect society from malpractice and incompetent individuals.

PRIVATE VOCATIONAL SCHOOLS - A school established and operated by an agency other than the state or its subdivisions, and supported by other than public funds, which has as its purpose the preparation of students for entrance into or progress in trades or other skilled occupations.

PROJECT - An article, activity, investigation, or problem chosen by or assigned to a student. The student is assisted by the teacher in its planning and completion.

PUBLIC VOCATIONAL SCHOOL - A secondary school under public supervision and control and supported by public funds which provides instruction that will enable high school youth and adults to prepare for, enter, and make progress in a skilled trade or occupation of their choice.

SKILLED MECHANIC - One competent to perform, with a high degree of expertness, the work in one or more specialized divisions of a given trade.

SKILLED OPERATOR - One competent to perform efficiently and expertly one or more kinds of repetitive production or single purpose jobs on machines or other special equipment demanding manual dexterity.

SURVEY, COMMUNITY - A fact-finding study of socioeconomic conditions and resources, community agencies, industries, business, farming, institutional practices, problems and practices of families, etc., as they exist at a given time in a given community. It is used by the school as a guide in revising school offerings to meet local needs.

SURVEY, OCCUPATIONAL - An investigation and evaluation to gather pertinent information about a single industry or the occupations of an area to determine the need for training, the prevalent practices, the labor supply and turn-over, for the purpose of maintaining the vocational program at a realistic level.

SURVEY, VOCATIONAL EDUCATION - A study to obtain necessary information as a basis for the proper development of programs of vocational education. It serves to identify the needs for vocational training, recommend suitable types of classes, assist in the development of new instructional processes, and evaluate the results of work already done.

TECHNICAL EDUCATION - Education to earn a living in an occupation in which success is dependent largely upon technical information and understanding of the laws of science and principles of technology as applied to modern design, production,

and distribution and service.

TECHNICIAN (INDUSTRIAL) - A worker on a level between the skilled tradesman and the professional scientist or engineer. His technical knowledge permits him to assume some duties formerly assigned to the graduate engineer or scientist. For example, technicians may design a mechanism, compute the cost, write the specifications, organize the production, and test the finished product. There are technicians in other occupational fields.

TERMINAL COURSE - One which completes the subject matter of a specific area with employment as the immediate objective.

TRADE AND INDUSTRIAL EDUCATION - Instruction which is planned to develop basic manipulative skills, safety judgement, technical knowledge, and related occupational information for the purpose of fitting persons for initial employment in industrial occupations and upgrading or retraining workers employed in industry.

UNIT OF INSTRUCTION - The smallest division of instruction for which a full lesson is taught. A single operation in a trade may constitute a unit of instruction.

VOCATIONAL CURRICULUM - A carefully selected group of courses or a sequence of subjects the content of which will provide the necessary skill and knowledge for success in a specific occupation.

VOCATIONAL EDUCATION - "Vocational or technical training or retraining which is given in schools or classes (including field or laboratory work incidental thereto) under public supervision and control or under contract with a state board or local educational agency, and is conducted as part of a program designed to fit individuals for gainful employment as semi-skilled or skilled workers or technicians in recognized occupations (including any program designed to fit individuals for gainful employment which may be assisted by federal funds under the Vocational Education Act of 1946 and supplementary vocational education acts, but excluding any program to fit individuals for employment in occupations which the Commissioner determines, and specifies in regulations, to be generally considered professional or as requiring a baccalaureate or higher degree). Such term includes vocational guidance and counseling in connection with such training, instruction related to the occupation for which the student is being trained or necessary for him to benefit from such training, the training of persons engaged as, or preparing to become, vocational education teachers, teacher-trainers, supervisors, and directors for such training, travel of students and vocational education personnel, and the acquisition and

maintenance and repair of instructional supplies, teaching aids and equipment, but does not include the construction or initial equipment of buildings or the acquisition or rental of land." As defined in Public Law 88-210.

VOCATIONAL EDUCATION ACT OF 1963 - Enacted "to authorize federal grants to states to assist them to maintain, extend, and improve existing programs of vocational education, to develop new programs of vocational education, and to provide part-time employment for youths who need the earnings from such employment to continue thier vocational training on a full-time basis, so that persons of all ages in all communities of the states-- will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training." As defined in Public Law 88-210.

VOCATIONAL SCHOOL - A school which is organized separetly under a principal or director for the purpose of offering training in one or more skilled or semiskilled trades or occupations. It is designed to meet the needs of high school students preparing for employment and to provide upgrading or extension courses for those who are employed.

VOCATIONAL SUBJECT - Any school subject designed to develop specific skills, knowledges, and information which enable the learner to prepare for or to be more efficient in his chosen trade or occupation.

WORK EXPERIENCE - Employment undertaken by a student while attending school. The job may be designed to provide practical experience of a general character in the work-a-day world.

WORK EXPERIENCE EDUCATION (OCCUPATIONAL EXPERIENCE) - Employment undertaken as part of the requirements of a school course and designed to provide planned experiences, in the chosen occupation, which are supervised by a teacher-coordinator and the employer.

NEIGHBORHOOD YOUTH CORPS

WORK STUDY PROGRAM - Administered by the local educational agency and made reasonably available (to the extent of available funds) to all eligible youths in the area served by such agency.

Employment under the program may be for the local educational agency or some other public agency or institution and will be furnished only to students who (a) have been accepted for enrollment as full-time students in an approved vocational education program, (b) need earnings to continue their vocational education, and (c) are at least 15 and less than 21 years of age. No student shall be employed under the program more than 15 hours in any class week or paid more than \$45 in any month or \$350 in any academic year, except in special cases.

APPENDIX F

SURVEY OF HISTORY OF VOCATIONAL EDUCATION
AND SURVEY OF CURRENT LITERATURE
ON VOCATIONAL EDUCATION

Survey of History of Vocational Education

From the days of Confucius to the present, educators have been faced with a dichotomy in the basic philosophy of education--i. e. , should education be concerned primarily with training the mind to pursue truth and acquire wisdom, or should it be more concerned with training the mind and body to acquire the knowledge and skill needed to perform useful services and produce needed goods ?

Early Chinese scholars held two distinct views regarding education. One school typified by Lao Tse believed that education must produce a certain state of mind, without which any external achievement would be useless, while in contrast the followers of Confucius believed that education is primarily a means of preserving society (60, p. 13).

Confucius set up a plan and purpose for education in an essay written approximately 400 B. C.

The jade uncut will not form a vessel for use; and if men do not learn, they do not know the way in which they should go. On this account the ancient kings, when establishing states and governing the people, made instruction and schools a primary object--as it is said in the Charge to Yueh, the thought from first to last should be fixed on learning all things, both those of truth and those which develop skills needed to preserve mankind (60, p. 14).

According to the system of ancient teaching, for the families of a hamlet there was the village school; for teaching basic knowledge and

working skills for a neighborhood there was the hsiang; for teaching wisdoms for the larger districts there was the hsu devoted to providing scholars; and in the capital there was the college for training philosophers and teachers (60, p. 15).

It is one of the outstanding facts in the history of culture and education that the first coherent material dealing with society that we possess in western civilization, namely, "Plato's Republic," is, at the same time, one of the most profound treatises dealing with organized society and education.

Plato's writing reflected the thinking of the contemporary philosophers and teachers, i. e., educate the free born and wealthy to serve the state and leave the perpetuation of the skills of artisans to the slaves. The education of the free born citizens was carefully outlined by Plato, but little was prescribed or suggested for teaching crafts and skills (60, p. 230).

One of the first direct references to the importance of teaching our students how to work, can be found in Luther's Letters to the Mayors and Aldermen in Behalf of Christian Schools.

It is not my idea that we should establish schools as they have been heretofore, where a student has studied Donatus and Alexander twenty or thirty years, and yet has learned nothing. The world has changed, and things go differently. My idea is that students should spend an hour or two a day in school, and the rest of the time work at home, learn some trade and do whatever is desired, so that study and work may go on together, while the children are young and can attend to both. They now spend tenfold as much time in shooting with crossbows, playing ball, running and tumbling about.

In like manner, a girl has time to go to school an hour a day, and yet attend to her work at home; for she sleeps, dances and plays away more than that. The real difficulty is found alone in the absence of an earnest desire to educate the young, and to aid and benefit mankind with accomplished citizens. The devil much prefers blockheads and drones, that men may have more abundant trials and sorrows in the world.

But the brightest pupils, who give promise of becoming accomplished teachers, preachers, and workers, should be kept longer at school, or set apart wholly for study (60, p. 233).

Comenius, a monk who lived in the late sixteenth century and early seventeenth century, presented us with the first course outline of the role of education within human society. Comenius felt that, "The education of man is best done in his early youth, and only then will it succeed" (60, p. 341).

It is a property of all things becoming that they can easily be bent and formed as long as they are tender, but that they refuse to obey when they have hardened. Soft wax can be modeled and remodeled, hard wax will crumble. The young tree can be planted, replanted, trimmed, and bent to any shape; not so the grown. So also the hands and limbs of man can be trained for arts and craft only during youth, as long as the sinews are soft. If someone is to become a good scribe, painter, tailor, smith, musician, etc., he must devote himself to his vocation as long as his imagination is still flexible and his fingers still elastic. In the same way piety must be implanted into the hearts during infancy lest it not root. If we want to educate a person in virtue we must polish him at a tender age. And if someone is to advance toward skill and craftsmanship he must be opened up for it in the first years of his life when his industriousness is still burning, his mind is malleable, and memory still strong (60, p. 342).

History of Vocational Education in the United States

While they are reading Natural History, might not a little Gardening, Planting, Inoculating, etc., be taught and practiced and now and then excursions made to the neighboring plantations of the best farmers, their methods observed and reason'd upon for the information of youth? The improvement of agriculture being useful to all, and skill in it no disparagement to any.

The History of Commerce of the Invention of Arts, Rise of Manufactors, Progress of Trade, Change of its Seats, with the Reasons, Causes, etc., may also be made entertaining to youth, and will be useful to all. And this, with the accounts in other history of the prodigious force and effect of engines and machines used in ward, will naturally introduce a desire to be instructed in mechanics, and to be inform'd of the principles of that art by which weak men perform such wonders, labour is sav'd, manufactures expidited, etc. This will be the time to show them prints of ancient and modern machines, to explain them, to let them be copied, and to give lectures in Mechanical Philosophy. . . . (60, p. 447)

So spoke Benjamin Franklin in 1748, concerning the need for the establishment of an educational system for the City of Philadelphia.

The colonies were not too eager to accept Franklin's suggestions and their educational policies and practices seemed to cling to the beliefs of Plato, Socrates and Aristotle, who frequently dismissed the whole of education of the inferior classes of Greece with the expectation that they would learn their vocations by apprenticeship or from their fathers (60, p. 444).

A time line approach to the development of Vocational Education and school conducted Cooperative Education in the United States

- reveals very little activity in this field prior to 1862.¹
- 1747 Ben Franklin established first "Mechanicks Academy" in Philadelphia.
 - 1768 Arthur Young published texts concerning agricultural education.
 - 1787 Cokesburg College in Maryland, first college in United States to offer courses in carpentry and gardening.
 - 1797 De La Howe provided first endowment to a college (Cokesburg College) to set up a program agricultural education.
 - 1802 West Point instigated a program of technical education patterned after French Military Engineering Academies.
 - 1805 Philadelphia Academy of Fine Arts founded a program in Drafting and Building Design.
 - 1806 William McClure opened a school in Philadelphia and offered Geology and Engineering studies.
 - 1814 "Publick Farm and Trade" school opened in Boston, Massachusetts.
 - 1820 Mechanics School opened in New York.
 - 1821 First "high school " started in United States - Boston.
 - 1821 Fowle -- Taught drawing in public schools in Boston.
 - 1822 Smith's -- Juvenile Drawing Book published in New York.
 - 1823 Gardiner Lyceum opened -- Dr. Birbeck -- an important exponent of mechanics institutions was the leader in the cause that saw the idea spread over the whole world. They tried to teach the workers the scientific principles behind their vocational practices, not the vocations themselves; they taught: math, chemistry, optics, heat, steam,

¹ Copied from class lecture notes, I Ed. 470 History of Industrial Education, Oregon State University -- Summer Session 1966.

astronomy, geology, mechanics, hydraulics, pneumatics, hydrostatics, arithmetic, French, stenography, and botany (England).

- 1823 Rensselaer Engineering and Agricultural Trade School founded at Troy, New York.
- 1824 Franklin Institute (formerly Mechanicks Academy) chartered and incorporated by City of Philadelphia.
- 1825 Mechanics taught at Maine Wesleyan Seminary. First U. S. labor unions.
- 1826 National Academy of Design formed at New York, New York. Mechanics begun at Andover College. Franklin Institute opens a High School.
- 1827 Oneida Institute opened at Whitesborough, New York.
- 1828 Ohio Mechanics Institute opened in Cincinnati.
- 1830 The lyceums formed: a term applied to literary and scientific institutions engaged in what today would be called adult education. (Eng.)
- 1846 Drafting included in the curriculum of Baltimore Academy.

The year 1862 could be called the year of Emancipation for Technical Vocational Education. The passage of the Morrill Act and the subsequent emergence of the Land Grant Colleges resulted in a fantastic growth period for agriculture, mechanic arts, and military tactics.

During the period from 1865 to the beginning of the Community College movement in 1896, many public and private schools were developed and dedicated to both classical studies and vocational education; for example:

- 1865 Ezra Cornell and Andrew Dickson White founded Cornell University.
- 1868 Illinois Industrial College founded to teach agricultural and mechanical arts (later became University of Illinois).
- 1869 Charles William Elliot became President of Harvard and developed the "elective" principal, i. e. - No subjects have greater worth than other subjects.

The American Secondary School was a natural out-growth of the idea of an egalitarian society in which the individual would be allowed to rise to the limits of his abilities. During the latter half of the nineteenth century, the secondary school was still a fluid concept, and, as such, was the object of conflicting views and the center of experimentation and controversy. The three and four-year high school did not become a stabilized institutional form until the mid-1920's. At the turn of the century the extension of the high school to include vocational education began in Michigan, Indiana and Illinois.

The innovations which took place in education during the 1920's encouraged the further development of secondary schools. The emergence of the concept of the comprehensive high school, the enactment of pertinent legislation (e. g. the Smith-Hughes Act), and later progress in vocational education provided the historical base for the broadening of the high school curriculum. Furthermore, the acceptance of the principle of publicly supported secondary education for all stimulated new thinking about the needs of those students who could not or would not complete the conventional college preparatory program.

As larger numbers of students enrolled and completed four years of high school, increasing numbers sought high school training for employment. Although many states attempted to provide more adequate opportunities for these high school students, it became apparent that something other than the traditional high school educational plan would have to be developed. The Smith-Hughes Act pointed the way for Educators.

History of Legislation Affecting Vocational Education

Smith-Hughes Act: In 1906 two progressive educators, Charles R. Richards, Columbia University, and James P. Haney, New York Public Schools, organized the National Society for Industrial Education. By 1910, great progress was made by the National Society in pulling together friends of vocational education. The American Federation of Labor lent its support. The National Education Association advocated that vocationalism be the central and dominant factor in the education of youth for an industrial age. Also, by this time, the National Grange, Association of American Agriculture Colleges and Experimental Stations, and the National Association of Manufacturers gave their support to the efforts of the National Society (32, p. 16-21).

Momentum was gathered in the movement for vocational education in the State of Massachusetts where a commission appointed by

Gov. Douglas recommended a state-wide system of vocational education which was enacted into law in 1906. Charles A. Prosser was the first state director of vocational education. By 1910 many other states followed Massachusetts' example.

By 1912, the National Society's mission had become single and clear: "a large-scale program of Federal assistance must be brought about" (32, p. 30).

Prosser of Massachusetts, in the meantime, was campaigning for federal support of vocational education. Bills were introduced in Congress beginning in 1906, but none of these bills were entirely satisfactory to the National Society.

Finally Congress authorized and the President signed a bill creating a Commission on National Aid to Vocational Education. The Commission's report is considered the Magna Carta of Vocational Education because of its heavy influence on subsequent legislation. Significant areas of the report dealt with "economic need" for vocational education, the need to "democratize" education to recognize "different tastes and abilities," to connect culture with utility through "learning by doing" and education with life through "purposeful and useful" training in schools recommended Federal-State assistance to a cooperative program of vocational education on the secondary school level, and the setting up of an independent Federal Board to administer the program.

As a result of the report of the National commission, the Smith-Hughes Act was presented to Congress in 1915. Delayed by congressional "pigeon holing," the bill was passed in February 1917, with only one dissenting vote (32, p. 31-33).

The passage of the Vocational Act of 1917--the Smith-Hughes Act was received with great joy by the National Society. This act provided seven million dollars to be allotted annually to states for the promotion of vocational agriculture, trades, industries and home economics education. It was passed when the great bulk of the American people was engaged in farming and industrial occupations. It was a tightly written act setting forth in detail what state and local authorities could do or could not do (32, p. 35).

Within three years of the passage of the Smith-Hughes Act, enrollment in federally subsidized programs doubled and the total program expenditures, including state and local funds, quadrupled.

Following the Smith-Hughes Act--considered by many to be the "Basic Vocational Education Act" were the:

George-Dean Act

- a. The act under which distributive education became recognized as a part of vocational education, approved by the 74th Congress, June 8, 1936.
- b. The act provided for matching of Federal funds on a graduated scale, starting at fifty per cent and reaching one hundred per cent in 1947 (39, p. 140).

George-Barden Act

In form, amending the George-Dean Act, but in reality, re-writing it.

- a. The act under which most distributive education programs operate; approved by the 79th Congress, August 1, 1946.
- b. Under this Act, Congress is authorized to appropriate . . . "\$2,500,000 for vocational education in distributive occupations, to be apportioned for expenditure in the several States and Territories in the proportion that their total population bears to the total population of the States and Territories . . ." (39, p. 140).

The Vocational Act of 1963 (Public Law 88-210)

- a. The act passed by the 88th Congress to broaden the scope and further support National Education authorizes Federal grants to States to assist them in maintaining, extending, and improving existing programs of vocational education.
- b. This Act for the first time, through its rules and regulations, specifically identifies the inclusion of office occupations as a vocational function (39, p. 142).

Survey of Current Literature on Vocational Education

The following quotation taken from "Vocational Education," published by Oregon State Department of Education in 1965, presents a summary of the historical perspective of the problems now facing Oregon Educators.

Since 1900, the United States society has changed from one predominately rural in nature to one that is overwhelmingly urban. Technological changes have resulted in rising productivity. Impressive increases in output per man have meant that relatively fewer workers are needed in the foods-producing industries (agriculture, mining, manufacturing, construction). At the same time, longer life expectancy, more leisure time, and other changes in the way of life have created a strong demand in the service sector of the economy (such as trade, finance, insurance, education, health, communication, legal services, local, state, and federal government).

The service sector surpassed the production sector in 1947, in the United States economy. Since that time, the gap between the two has widened at an accelerating rate in favor of service employment. This shift in

the composition of employment has had a counterpart in the shift from blue-collar to white-collar occupations.

The effect of these occupational shifts will continue to be clearly toward a rising demand for workers with relatively higher levels of education and skill, and a narrowing of employment opportunities for the unskilled. The importance of good educational preparation for employment will also be increased by the rapidly changing nature of our technology and the consequent frequent changes of content in many occupations. Workers will have unprecedented need for occupational flexibility and flexible and responsive labor force can be built (42, p. 1).

The year 1963 might be named the "Year of Vocational Education." P. L. 88-210 has provided students of Vocational Education a wealth of new research and stimulated a great deal of writing in this area.

Roy Dugger, Deputy Director of Vocational and Technical Education, U. S. Office of Education in an article in the N. A. S. S. P. , May 1966, Bulletin said in regard to this act:

Effective Use of Act is The Challenge

Educators today are faced with the exciting challenge of achieving full benefits from this far-reaching program, the goal being utilization of the best talents of the most people for a full and balanced economy. The training of thousands of so-called socio-economically handicapped people, those whose opportunities have been few and limited, to become skilled and usefully trained for gainful occupations; and so providing all of the work force with the vocational and technical skills needed to assure a full life free from poverty and the hardship and indignity of unemployment will be their reward (18, p. 23).

The former U. S. Commissioner of Education, Francis Keppel, recently estimated that seven million young people will enter the work

force in the next ten years without the benefit of high school graduation unless steps are taken to provide programs to meet their needs, interests and motivations (34).

Grant Venn in the book, "Man, Education and Work" expressed this reaction to the problem facing educators:

The full impact of the new technology has been slow to register on the American consciousness. To date, the instances of "technological unemployment" are like the cap of an iceberg; the difficulty of appreciating what is below lures many into believing we can sail blithely ahead without changing course. Indeed, the nation has been assured for years that for every job destroyed by automation two new ones are created, and this notion has been slow to die. Because automation and computers have been introduced selectively, their impact has often been limited to the individual or a local community. Thus, many educators and other public leaders have not discerned that the forces of technology are immediate in importance and national in scope, and that they carry serious consequences for the economic and social life of the entire country.

The nation's task is to make certain that the human promise of America is not lost to the economic promise of technology. In this decade the issue is joined: young people are entering a technological world of work unequipped with the tools they need for survival. More than a million of them are now out of school and out of work and, given the circumstances, this figure can but continue to rise. The alternatives before the country are clear.

We can try to hold young people in school and off the labor market for a longer period of time, by simply expanding the educational system. . . .

We can let them remain idle. . . .

We can put them to work "raking leaves from the public lawn". . . .

We can equip them in school and in college with the skills

they need to become competitive in a technological work world. . . . (63, p. 5).

There may be a problem in semantics regarding the terms "vocational occupation," "work experience" education and "cooperative education." Nevertheless, there is no doubt that the areas of education that these terms represent are of value and meet the needs of many students. In recent years the problem has become crucial and Congress has taken steps to remedy the situation by enacting the Vocational Act of 1963.

In an article "Vocational Education for a Dynamic Economy," published in the May 1965 issue of the N. A. S. S. P. Bulletin, Joseph T. Nerden suggested that we give immediate attention to the following major considerations:

1. Preparation of young people for careers in business, technical occupations, skilled trades, the health occupations, the service trades, distributive occupations, agriculture and combinations of these; the removal of lines of demarcation between major and traditional vocational areas must be expedient. There is ample evidence of rapid growth in occupational groupings which cut across the traditional limits of such areas.
2. The field of vocational homemaking now provides many more job opportunities for young people who will seek employment. Under the new Vocational Education Act, ten per cent of all funds available for vocational homemaking must be used in preparing young people for occupations which require the skills and content commonly associated with home economics.
3. It has become increasingly evident that a liberal segment of general education is an essential part of total

job preparation. Most employers acknowledge the need for young people to acquire skills, technical information, and general education, since a combination of these elements is required for ultimate success on the job.

4. The concept of comprehensiveness in the education of the young people being prepared for the world of work has been given attention in some secondary schools, and to a considerable degree in public institutions beyond the secondary school, especially in the comprehensive community colleges. Where this has occurred, there is evidence of articulation between general education and vocational education, and such fields as industrial arts, general business education, and home economics provide opportunities for youth to participate in motivation, exploratory, productive and functional activities. Industrial arts, home economics, business education and other similar offerings are by their own definitions part of general education. At the same time they have the potential of providing more young people with a fuller understanding of the world of work and an opportunity to explore on a pre-vocational basis a variety of vocational possibilities. Both the general education and the vocational guidance objectives of the high school may be achieved here. Furthermore, students understand the common learnings associated with general education better when they see the applications of these learnings and concepts in the business, home economics, and industrial arts laboratories (40, p. 10).

The task of providing both general education and vocational education for millions of young people is inevitably an enormous one. Numerous patterns of school organization have been suggested to achieve it. Some writers feel strongly that the comprehensive high school is the best possible way to meet the challenge of the future. Other writers feel that the long and successful history of vocational education in many states has shown the separate or area vocational

school to be the best possible organization. They point to the comprehensive vocational schools which have been highly successful in such states as Connecticut, New Jersey, Massachusetts, and New York (50, p. 10).

A survey of literature points up the increased need for education to fit our rapidly changing technological society. Venn states:

The institutions of the technological society are intellectual ones, and the use of cognitive faculties becomes paramount in work, as it has always been in education. Over a wide range of occupations in a new technology, job entry and upgrading become increasingly a matter of education; more of what is basic to successful performance in today's occupations can best be taught within formal educational frameworks (63, p. 6).

Many authors indicate the present educational system is not serving the needs of students and society. Again quoting from MAN, EDUCATION AND WORK,

. . . education pays lip service to the importance of providing an educational response for the wide range of student aptitudes, abilities, and interests, but largely limits that response to general or academic studies of varying degrees of rigor. There are many young people to whom such studies offer little of relevance or challenge, but whose motivations toward educational achievement could be renewed in a more practical program of occupational development suited to their real abilities, aptitudes, and interests (63, p. 25).

Much of the literature expounds the theory that an increased and improved emphasis on occupational education can best fulfill the stated objectives. Venn summarizes it by saying,

A significant part of the answer lies in providing more and better occupational education within the educational system.

At the present time only one student in ten leaving the educational system without a bachelor's degree has some specific occupational preparation. This is only a small fraction of the real student potential for occupational preparation within the educational system (63, p. 32).

Educational needs of individuals and the welfare of the nation can both be promoted by devising and implementing an occupationally oriented curriculum that has meaning and purpose for the student.

An article by J. Kenneth Little states:

Research in this field (Changing World of Work) will study occupational trends in the job market; the analysis of human skills and knowledge required for current and developing occupations; a match or lack of match between job requirements and training programs. . . . (36, p. 42).

Venn, in referring to the high school drop-out, states that two-thirds of them are ". . . average young men and women, with considerable potential for occupational development within the schools. And they are rebellious only in the sense that for most of them the subjects they studied in school were of little interest" (63, p. 6).

This statement appears in MAN, EDUCATION, AND WORK:

Occupational education holds the promise of the diversity and practicality that the educational system now lacks in its efforts to educate all our young people to their full potential (63, p. 25).

To achieve the occupational objectives deemed necessary, several authorities propose the development of vocational courses, curriculums, and instructional materials keyed to the requirements of modern occupational opportunities.

One of the Panel's recommendations is:

It is recommended that the production of instructional materials for vocational courses be recognized as vital to an effective national program and that one or more instructional materials laboratories be established to produce and distribute vocational materials (61, p. 240).

The rationale of this statement, i. e. , occupationally oriented courses may be vehicles for achieving proficiency in primary skills as well as providing specific occupational preparation, is also supported by the literature. Quoting from the report EDUCATION FOR A CHANGING WORLD OF WORK,

General education -- language and arithmetic skill, plus basic knowledge of the world about us -- itself contributes indispensably to occupational competence. Vocational education and general education are complementary and equally important to individual occupation competence (17, p. 16).

Haskew and Tumlin lend support to the rationale in these statements:

Vocation-centering may be an efficient device for total education for able students. . . .

Among junior and senior high school students there will apparently always be many whose latent powers are undiscovered and undeveloped when the standard disciplinary approach represents their sole opportunity. The thought of work-preparation may furnish necessary motivation for some; procedure from projects to concepts may fit the learning style of others. Thus, occupationally titled course joined with talent-utilizing guidance may take their place along with English and foreign language as core curriculum offerings for capable students; outcomes sought will be largely identical, but the vehicles will differ (24, p. 76-77).

Walsh and Selden suggest the general sequence for answering the question "what" and "how" of occupational education development necessary to match present and future needs.

Program planning for vocational education looks in two directions at once; the occupational areas to be included in the overall program must be determined: then other plans must be made for structuring specific curriculum for the several occupational areas. For the one purpose, determinations are based on man-power requirements and on labor market information; for the other they are based on occupational analysis and the programming of learning units.

This inherent quality requires the utilization of many individuals in a wide range of services in order to achieve viable goals in each of the ventures (64, p. 88-89).

The following excerpts from an article written by Robert W. Young in "School Shop," XXIV, October, 1964, brings into focus another problem faced by educators and citizens engaged in developing functional, related vocational educational programs.

The current condition of vocational education is illogical, this could be attributed to four influences.

1. Americans have an almost unthinking belief in the "English gentlemen" philosophy of life. We emulate the Roman politician, the Greek philosopher, etc., and we study Western languages. This educational diet has produced generations of European gentlemen--with the aid of fencing, riding, boating, whist, and other continental pastimes. Although expanded and modified, the solid core of the high school curriculum and the first two years of college are direct descendents of the good and the bad aspects of this concept.
2. A second influence is in the character of college and accrediting personnel. They are academically oriented

college professors, superintendents, and principals and they base their judgement of secondary schools primarily on the academic success of the graduates in colleges and universities. Very few of them know the difference between manual training, industrial arts, practical arts, and vocational education.

3. A third influence, acting to impede vocational education, is the attitude of secondary school officials, most of whom do not understand vocational education; or if they do understand they find the machinery of higher education and accrediting too overwhelming to resist, even in the interest of the majority of their students who will never attend college.

4. The fourth, and probably greatest, influence resistant to vocational education is the attitude of parents and students who read college catalogs and bulletins. Descriptions of requirements invariably include the five basic disciplines of science, math, English, social studies, and language, usually specifying amounts of each. Some bulletins state that exceptions may be authorized, but aspirants for college admission never feel secure in settling for exceptions (65, p. 26).

Consequently, vocational education deals largely with students who are presumed unable to succeed in college.

This is a negative premise on which to base the most positive segment of the high school program; yet vocational classes have become stations in which to seat students after the college oriented portions of their schedules have been filled.

To compound the problem, potential dropouts generally do as poorly in vocational courses as they do in the academics, causing much unjust criticism to be directed toward the vocational teacher. Young concludes with, "There would be far less cause for criticism

if vocational education were perceived and practiced correctly by educational leaders, students, and patrons" (65, p. 27).

A number of studies indicate a need for more diversity in high school curriculums. High school administrators, counselors and teachers must organize their resources and ideas to create a realistic program that takes into account the fact that more students in the public schools should be prepared for the world of work than for college. Accordingly, secondary schools need to be organized so as to provide a full range of opportunities for all students "college-bound as well as the non-college bound" to explore and experiment with major clusters of occupations. Vocational programs must be designed to serve the technically gifted as well as the less able. Vocational education should provide the "open door" to opportunity for those who, for various reasons, cannot or will not enter or complete college.

Many prominent educators and numerous studies have testified that occupational education promises to supply the diversity and practicality that the educational system now lacks in its efforts to educate all our young people to their full potential. In Franklin Keller's book, a call was issued to "provide secondary education for all youth in all kinds of occupations" (33, p. 26). Norman C. Harris advocated that "the high school should plan most of its vocational curriculum so that it will be preparatory to advanced study and training" (25, p. 3).

Ohio studies showed that about 75 percent of their students make an occupational choice other than those professional positions requiring college degrees. A state-wide study of enrollment patterns in the Ohio public schools showed only 19 percent enrolled in any type of vocational programs and 81 percent enrolled in college preparatory or general education programs (54).

Not so typical were the results listed by Grant Venn in Man, Education, and Work. He stated that:

The city with the most extensive program of secondary vocational education (Milwaukee) is one that graduates 94 per cent of its students from high school. The state with the greatest occupational education opportunities beyond high school (California) has been able to induce a great many of its high school graduates to continue their education (63, p. 25).

Studies completed in Minnesota and Illinois present ideas worthy of thought. The Minnesota study included the surveying of all vocational-technical schools to identify their geographic distribution in relation to population needs and student enrollment. This study pointed out that additional schools are needed and named the existing schools that should be expanded. Lacking in this survey, however, was attention to specific programs for preparing workers for existing and future job possibilities (54).

The Illinois study focused only on employment. Therefore, it has limited applicability to this paper. However, it does point out the value and feasibility of gathering information on characteristics of

the labor force (30).

A two year study of vocational educational programs in nine selected communities in the middle Atlantic States indicated the value of knowing the extent to which existing programs are preparing students for the labor force, the ways in which existing programs can be strengthened to reduce dropouts and to minimize unemployment of graduates. The study has limitations deriving from the design of the research as a sampling study (54).

The Jackson County, Oregon, study was conducted to discover the present status of vocational education in the Jackson County Schools and to determine what was needed in the way of vocational education for the future. As an effort to remedy the deficiencies that were found in the vocational education programs, the study suggested that a more equitable and workable balance between vocational education and preparation for college be established in the high schools of Jackson County. Such a suggestion seemed to indicate the need for an area vocational school with a diversified occupations work program. In addition, the Jackson County study showed the importance of obtaining accurate information about present and future employment (45).

The Lane County, Oregon, Vocational Education Survey investigated the needs for vocational education in the area served by the Lane Community College. A large amount of information was

gathered concerning the present situation of population and employment along with the opinions of labor regarding vocational education needs. One of the prime recommendations was establishment of a Cooperative Education Program (50, p. 9).

The Columbia County, Oregon, study recommended that:

1. A vocational center be established.
2. Exploratory or pre-vocational courses be offered and maintained in the local schools subsequent to vocational training.
3. Attention be given to training for related occupational clusters.
4. Students be trained for jobs external to Columbia County.
5. More attention be given to library materials for vocational education.
6. The school develop a broader system of guidance and counseling to fit the vocational education program.
7. The school provide a placement program.
8. The school provide cooperative work experience education (4, p. 13).

Kenneth Shibata, in his paper, "A Program to Determine Needs in the Field of Vocational Education in Local School Districts," suggests a modified outside and self-survey which includes a study of the community and its occupational picture. His objectives and basic areas of data considered essential to an adequate vocational education survey strongly support the procedures of this and other similar studies (54).