This paper examines problems in work experience education in five California junior colleges. As equipment for occupational programs is both expensive and soon obsolete, many colleges have turned to industry to provide the work experience. Thus the student can not only be involved in real work situations but also earn as he learns. All such jobs, part of the course requirements, are supervised by a teacher or coordinator and the employer. The value of such programs to students and community and the usual methods of operation are discussed. One survey found these major difficulties: (1) lack of coordinated supervision by college and employer; (2) little relation of college courses to job experience; (3) conflicts in work and class schedules; (4) student over-interest in the paycheck; (5) occasional poor placement of students. Los Angeles Trade Tech reported that companies actively seek participation in the programs and that lack of time is the worst problem. Orange Coast College had difficulty finding suitable work stations and persuading employers to pay wages. Pasadena City College's problems were lack of time for the coordinator, students leaving school for jobs for which they were not yet ready, and inadequacy of state average daily attendance payments. Long Beach City College, in its auto mechanics program, noted that its students had trouble maintaining the clean driving record necessary for their jobs. The lack of a full-time coordinator was Los Angeles Pierce College's biggest problem. (HH)
JUNIOR COLLEGE

WORK EXPERIENCE EDUCATION

A Paper Presented to

Dr. Johnson

University of California

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In Partial Fulfillment

of the Requirements for

Education 470-C

By

Glenn E. Hayes

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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

In recent years we have witnessed ever increasing numbers of young people entering the labor force. The majority of these young people are unskilled and unprepared to meet the demands of our rapidly changing technological society. It has been estimated that the work force will grow at the rate of over one million persons each year from this time forward. Assuming this to be a realistic estimate and with the knowledge that the educational standards required by business and industry have continuously advanced, it is logical to be concerned with providing general and occupational education for students that will enable them to be successfully employed.

Vocational educators have long stressed the need for programs to imitate the real work situation in order to make the student as aware as possible of employee responsibilities. Today, more than ever before, occupations are becoming more specialized and more diversified within an industry. With the cost of education rising continually all possible sources of support must be utilized to help with the educational cost of youth. Perhaps through greater participation of business and industry, in cooperation with the educational institutions, occupational education can be provided and skilled employees can be supplied for the labor force through a more extensive utilization of cooperative work experience education.
I. THE PROBLEM

Statement of the Problem. The primary purpose of this study was to investigate the scope of cooperative work experience programs in the southern California region today and to identify problems that administrators and coordinators are experiencing with the programs.

Limitations of the Study. Since there is a great variety of cooperative work experience education programs now in existence in many of the junior colleges in southern California, this study was limited to six of the junior colleges.

These are listed as follows:

Los Angeles Trade Tech
Orange Coast College
Pasadena City College
Long Beach City College
Los Angeles Pierce College

Importance of the study. It is the responsibility of educators to investigate new ideas and methods of teaching that will help reduce the cost of educating students. Occupational education is considered one of the most expensive offerings of the junior college because of the high cost of duplicating the real work situation. Many occupation programs require extensive equipment and materials that are expensive to obtain and to maintain. In a rapidly changing technological age, it is virtually impossible for any institution with limited facilities and budget to adequately prepare students to enter specialized fields of work. In an attempt to prepare students, many junior colleges
have taken the student to the industry by way of cooperative work experience education programs. Such programs link the classroom with the real work situation and when organized and supervised effectively, they provide the student with current techniques and processes which broaden the scope of his understanding and skills in preparation for employment. In addition, this program provides the student with a "Learn while you earn" program without which the student might have to terminate his college education. (8:65)

II. DEFINITIONS OF TERMS USED

Work Experience Education. The term "work experience education" should be distinguished from the term "work experience," a temporary or casual job which is related to the school program and may provide experience in a given occupational area. Such jobs, however, are not work experience education since there is no specific relation to the school program, nor is there school supervision involved. The newer term, "work experience education," as recommended in the study conducted by Henry T. Tyler is preferred in California. (10:51)

According to the Dictionary of Education work experience education is defined as "employment undertaken as part of the requirements of a school course, designed to provide planned experience in the chosen occupation which are supervised by a school teacher or coordinator and the employer. (4:103)

Listed in the Handbook on Work Experience Education were several criteria which must be satisfied in order to have a "true" work experience program. According to this course, true work experience education results only when:

it encompasses a systematic plan whereby young people, while still in school, gain realistic employment experience through part-time work performed under all of the following conditions:
1. 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.

2. The school assigns qualified personnel to direct the program and to coordinate student jobs with school learnings.

3. 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.

4. 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. (6:2)

The California Administrative Code classifies cooperative work experience programs in three categories.

1. **Vocational** - in which the maximum of 16 units could be earned and in which work on the job must be related to a class taken concurrently at the junior college.

2. **General** in which the maximum of 6 units could be earned and in which the work on the job need not be related to the classroom subjects.

3. **Exploratory** - in which the maximum of 3 units could be earned and in which the students explore several fields of work which may or may not be related to classroom activities. (3)

Coordinator. According to the Handbook on Work Experience Education, the coordinator is the school employee who has the overall responsibility for the administration and coordination of the work experience education program and to whom the student in such a program is at all times responsible.

Coordinator-Teacher. According to Ivine and Runge,

A coordinator-teacher will perform the same duties and have the same responsibilities as the coordinator, and in addition will teach the related and vocational classes in which the cooperative work experience students are enrolled. A coordinator may not have classroom teaching to do. These two terms often are used interchangeably. (7:156)
CHAPTER II

REVIEW OF THE LITERATURE

To become familiar with the characteristics and types of work experience programs offered in the junior colleges the investigator conducted a brief review of literature.

I. CHARACTERISTICS

Development. In 1906, Dr. Herman Schneider, who had worked his way through Lehigh University, secured authority at the University of Cincinnati to try a plan which he had worked out as a result of his experience as a student—the cooperative plan. His plan was to combine engineering education with part-time shop and factory work for the engineering student. (7:47)

The values of combining work and study were further popularized by the Antioch plan of alternate periods of work and study. Widespread interest in combining work . . . . . . . . . . United States from the program of the National Youth Administration and from manpower shortages during World War II. As the war effort brought more men and women into the labor force for part-time work, the importance of the work study plan was emphasized and tremendous growth was experienced in the numbers of programs implemented. (7:45) Following this was Federal legislation which included provisions for "cooperative" education programs, gave further impetus to their expansion. The George Barden Act, the Vocational Education Act of 1963, and more recently, the Vocational Education Act of 1968 have aroused new and greater interest in cooperative education programs in the junior college.
In addition to Federal legislation, several professional organizations are bringing attention to cooperative education in the United States. The National Commission for Co-operative Education in Higher Education was established for the purpose of encouraging new programs and strengthening existing programs in work experience. Also, the American Association of Junior Colleges established a Work Experience Education Advisory Committee composed of representatives from education, government, industry and research to examine the place of work experience education in the junior college in 1967.

In 1963 a survey was conducted on work experience education programs at junior colleges in the state of California. Thirty-three programs distributed among 18 different junior colleges were studied. The junior colleges in the southern California region that were identified in the study as having such programs were as follows:

Ventura Junior College - Ventura, California  
Pasadena Junior College - Pasadena, California  
Cerritos Junior College - Norwalk, California  
Orange Coast Junior College - Costa Mesa, California  
Chaffey Junior College - Alta Loma, California  
Riverside City College - Riverside, California  
Santa Ana College - Santa Ana, California  
San Bernardino City College - San Bernardino, California

Values of Work Experience Programs.

Values to the Students. It has been the contention of educators that experiences which are closely aligned with the actual working conditions are of greatest value to the student preparing for gainful employment. The Handbook on Work Experience Education lists the following specific areas in which students benefit from such programs.
1. Augmenting the financial resources of the students and assisting them to remain in school.

2. Gaining knowledge and attitudes necessary for successful job performance.

3. Broadening their understanding of the occupational world and of working conditions in the world of work.

4. Developing an appreciation and understanding of the relations between formal education and job success.

5. Giving students who must work a feeling that their jobs have added importance. (6:3)

Cooperative education helps markedly to orient college students to the world of work. According to Wilson, James and Lyons, cooperative education programs furnishes students with opportunities for exploring their own abilities in connection with real jobs and to find a direct means of gaining vocational information and vocational guidance not only in the occupation in which they are employed but in a number of related fields as well. The students also have the chance to test their aptitudes more fully than is normally possible on the college campus. (9:31)

By coordinating work experience with the campus education program, theory and practice are more closely related and students find greater meaning in their studies. In a national survey of work study education, Henry W. Tyler found that cooperative activities of work and study increase student activation. He reported that "as students see connections between the jobs they hold and the things they are learning on campus, greater interest in academic work develops." Tyler stated that "for many students, cooperative work experience contributes to a greater dependence upon their own judgments and a corresponding development of maturity." (10:46)
Values to the Community. The Handbook on Work Experience Education also lists several values to the community. These are as follows.

1. Provides the community with an increased source of well trained workers.
2. Serves as a training program for prospective employees of small businesses or industries that are unable to conduct extensive training programs within their own establishments.
3. Provides the employer with employees who are receiving additional training through related instruction at school.
4. Provides the community with a labor force that is more thoroughly trained than graduates who have not had work experience education and hence works more efficiently.
5. Increases the possibility that young people will remain in the community after graduation, since they will already have found a place in community life. (6:5)

Advisory Committees.

Most authors who have written about cooperative work experience education programs have made a special point of the importance of advisory committees.

Barlow reported that an advisory committee which includes employer and employees representatives, school personnel, and interested persons from the community in which the work experience program is to operate is very helpful not only in providing counsel and guidance to the program, but in establishing acceptance and support of the program as well. (6:11)

Of the 33 programs studied in 1963, 70% of the 18 junior colleges had advisory committees and the average membership was 11. The study indicated that almost all of the more successful cases, the coordinator, department chairman, dean of instruction, dean of vocational education, director of placement and members of the curriculum committee were involved in the selection, endorsement or approval of the advisory committee members. "It is extremely important that members of an advisory committee be individuals who have an understanding of and interest in the total educational program.
of the community", according to the Handbook on Work Experience Education.

The appointment period for the advisory committee member may vary some with the school. The 1963 survey indicated that one year appointments were the most popular because it added flexibility to the committee in that active members may be retained and members who are uninterested or inactive may not be reappointed at the end of the year. The Handbook on Work Experience Education stated that "the customary term of service is three years with one-third of the members terminating their service each year". (6:17)

A clear statement of the functions and limitations of an advisory committee on work experience education should be set forth in the plan of operation for the program. "Of greatest importance is the understanding that the committee is only advisory in character, and that its advice is to the board of trustees, to accept or reject. It has no administrative or policy forming power. The good committee will make suggestions on policy and procedure, but the authority rests with the policy-making body of the college". (6:17)

The Coordinator.

Work experience education consists of two major parts; the school program and the on-the-job program. The function of coordination is the development and maintenance of appropriate relationships between these two major parts. Henry T. Tyler identified this relationship as follows: "The school must take effective means to assure that the experiences gained by work experience education students through their employment will be coordinated with learning in the school itself". (10:42)

The coordinator of any work experience education program must perform
in a wide variety of functions in order to assure success of a program. If he assumes his duties with a program that has been in operation for some time, his duties probably will begin with finding and approving work stations. Other general duties include drawing up a training agreement, working with the student and the employer on the job and in school conferences and related instruction classes and evaluating students' work. Most of the sources indicate that the success of any given cooperative work experience program is dependent primarily on the ability of the coordinator to perform in his function. (7:281)

The Student and his Work Station.

In the final analysis the success of a work experience education program must be measured in terms of how much the students are actually benefited. It is the responsibility of the school administration, the coordinators, teachers and counselors to see that the students are involved in a worthwhile program. (5:138)

One of the essential prerequisites for this success is the provision of suitable work stations. Finding such work stations is usually the responsibility of the coordinator. In carrying out this assignment the coordinator must give consideration to the needs, interests and abilities of the student and must attempt to match the job and the student. (5:130)

The types of work stations will vary, depending upon the type of work experience education to be conducted. The scope of work station possibilities is usually determined either through community surveys, or by direct contact and solicitation of employers by the coordinator. In choosing the appropriate work station for a particular student, the coordinator may find it necessary to visit several employers before he is able to make a suitable selection.
The standards for selecting work stations are set forth in the California Administrative Code in which the following are listed:

(a) The employer is in sympathy with the educational objective of providing work experience for the pupil.
(b) The employer knows of the intent and purpose of the work experience education program.
(c) The work station offers a reasonable probability of continuous employment for the pupil during the work experience period for which he is enrolled.
(d) The employer has adequate equipment, materials, and other facilities to provide an appropriate learning opportunity.
(e) Overall desirable working conditions prevail which will not endanger the health, safety, welfare, or morale of the pupils.
(f) The employer will provide adequate supervision to insure a planned program of the pupil's job activities in order that the pupil may receive maximum educational benefit.
(g) The employer, as required by law, will provide adequate compensation insurance.
(h) The employer will maintain accurate records of the pupil's attendance.

Problems of Cooperative Work Experience Education Programs.

Very little seems to be documented with regard to difficulties that have been encountered in the operation of work experience education programs. In a survey conducted by Johnson, however, he found that difficulties could be classified into five major categories. These are listed as follows:

1. Coordinated college-employer supervision of student employment. At times students report that inadequate supervision is provided by the college and/or the employer. In particular, such supervision is occasionally not coordinated, so that employers and college staff members give conflicting advice.

2. Relationship between college courses and employment experience. Students at a number of colleges report that their course work is but slightly related to their work experience.

3. Conflicts in scheduling work experience and college classes. This problem is, of course, eliminated when the student at alternate periods studies full-time and then is employed full-time.
4. **Student overemphasis on financial remuneration in his employment.** Students, it is reported, often wish to accept higher paying employment which is indirectly related to their course work, rather than lower paying positions which are directly relevant to their educational goals.

5. **Student placement.** Upon occasion, even though students are placed in positions for which they are qualified and which are related to their educational and occupational goals, employers are not satisfied with their work. (This is seldom reported, however, high employer satisfaction appearing to be the rule.) (8:68)
CHAPTER III

METHOD OF PROCEDURE

Five junior colleges were selected randomly from the total number in southern California. The total number for purposes of this survey included only those colleges which have been in operation for more than 3 years and within the perimeter fixed by Los Angeles Valley College, Orange Coast College, Santa Monica Junior College and Mt. San Antonio College. Under these conditions the total population from which the sample was drawn was 25. The junior colleges in the sample are identified as follows.

Los Angeles Trade Tech.
Orange Coast College
Pasadena City College
Long Beach City College
Los Angeles Pierce College

Interviews were conducted with either a coordinator or teacher-coordinator of work experience education programs, or a member of administration familiar with the programs.
CHAPTER IV

RESULTS OF THE SURVEY

Los Angeles Trade Tech. Floyd Nardella, coordinator at Los Angeles Trade Tech. is very enthusiastic about the programs there. In one year of operation they have implemented seven new programs and have approval for eleven more to begin the spring semester of 1970.

The programs that are now in operation are as follows.

1. Automatic vending machines.
2. Computer maintenance.
3. Photo offset.
4. Library science.
5. Merchandising display.

Programs that have been designed and approved for implementation next semester are as follows:

1. Cabinet making.
2. Air conditioning.
3. Refrigeration.
5. Banking supervision.
6. Merchandising.
7. Chemical technology.
8. Photography.
9. Radio communication.
10. Electrical calibration and motorology.
11. Metallurgy.

Nardella is very excited about the cooperative programs at Los Angeles Trade Tech. He pointed out that managers from many different kinds of companies are pursuing him to participate and offer many kinds of different work stations.

He pointed out that most of the problems centered around "time". There is so much interest in the programs that it is difficult to apportion his time wisely. Nardella also pointed out that they use a new computer
system for grading and adding or dropping courses, and that key punching has been a problem. He pointed out, however, that these are temporary problems and predicts that these will be for the most part resolved by the end of another semester.

He emphasized also that advisory committees had a very strong role in making their programs work effectively. (16)
Orange Coast College. John Owen, District Director of Vocational Education at Orange Coast College believes that their cooperative work experience programs have substantially benefited their students. He commented that a very high percentage of the students who participate in the programs do in fact become full time employees of the participating companies. Ironically, Owen stated that their most significant difficulty in establishing new programs and maintaining on-going programs was locating suitable work stations. He stated that employers disagree that they should pay the student wages. They feel that if such programs are a part of the education plan, the students should not receive payment for their services. Owen also commented that financial remuneration from the state was not nearly sufficient to operate a program adequately.

Owen stated that they now have cooperative work education programs in every area of study at the college. This is an approximate 100 per cent increase since last year. (15)

Pasadena City College. Leonard Dionisio, coordinator of cooperative work experience education programs at Pasadena City College, explained that they have a number of cooperative programs and that he believes they are generally very successful.

Dionisio described three difficulties they experience, but explained that such problems tend to be inherent in cooperative type programs. (1) Time. He explained that he devoted many "extra" hours to the job of finding suitable work stations and in discussing student progress with employers and teachers. These coordination efforts are very time consuming. (2) Students leaving school. Students sometimes quit school to take a job before they are really
prepared and as a consequence some are less equipped to hold their positions. Some students need to work and seem to be unable to remain in the cooperative programs sufficiently long in order to acquire adequate skills. (3) **Financial remuneration.** Financial remuneration based on average daily attendance is only a fraction of the amount borne by the programs. (11)

Long Beach City College. Long Beach City College offers two technical programs in work experience. The programs are:

2. Auto mechanics.
3. Refrigeration.

A one hour lecture is required with the work experience course. The student can enroll for one to four units of credit. Each additional unit requires an additional eight hours per week of employment.

Plans are being made to increase the course offerings, and existing programs are expected to expand, according to Wayne Hart, teacher-coordinator of automotive technology. Mr. Hart explained that a very high percentage of his students (70 to 90%) initially continue their employment at an automotive dealership after graduation. Among the work stations named were such agencies as Mel Burns Ford and Harbor Chevrolet. A problem that Mr. Hart identified, which appears to be typical of this field of instruction, is that students enrolled in work experience courses in auto mechanics must have and maintain a "clean" driving record in order to be insured by the employing agencies. According to Mr. Hart this has been a serious problem for some students in the past. (13)

Los Angeles Pierce College. An interview with Mr. Goodman revealed that they presently have a general type program in merchandising, data processing, and accounting. The student is expected to have had at least one
year successful work in a closely related field. The student then may register in a 2 unit course which combines work on the job and classroom sessions in which the student reviews problem areas in class. Mr. Goodman stated that the program has been very beneficial to the disadvantaged students.

The most significant difficulty encountered in the operation of their programs, according to Mr. Goodman, involved the lack of time to devote to program coordination. Mr. Goodman has other major responsibilities related to the administration of his department and he believes that when they hire a coordinator whose responsibility is directed specifically toward these programs, the programs will expand even more. (12)
CHAPTER V
SUMMARY AND CONCLUSIONS

Programs of cooperative work experience education during the last few years have increased markedly in the junior colleges. As might be expected, it appears that the most rapid growth has taken place in the colleges where there is a full time coordinator assigned specifically to such programs.

Difficulties that are being experienced in the sample studied relate to (1) inadequate time to do what the coordinators feel to be a fully satisfactory job, (2) difficulties in finding new work stations and (3) insufficient financial reimbursement. Other difficulties appear to be more or less unique to individual programs.
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