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ABSTRACT

The follow-up study evaluating the effectiveness of occupational education programs in Illinois focused on six principal dimensions: the basis on which occupational decisions were made; the post-high school status of occupational program completers; employment experience of program completers; alumni assessments of program helpfulness and recommendations for program improvement; employer/supervisor appraisals of employee preparation for employment; and entry level personal qualities and job skills considered important for employment. Findings, reported by program areas, varied according to program. Occupational program alumni from 102 Illinois high schools provided questionnaire data. The 5,203 usable responses constituted 46.4 percent of the total number sent and 9 percent of the total number of Illinois 1971 program completions. Another 2,651 responses were obtained from employers of alumni. Among the several recommendations for improving the followup system are: develop better identification of occupational programs and standardization of terms; appropriate funds for additional software; make the data available at appropriate times; discover new ways to relate subsequent employment to training taken; increase emphasis on career education; provide school district placement services: re-evaluate evaluative criteria; and base programs on job analysis. (Statistical tables are included.) (AG)



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FOLLOWUP REPORT on ILLINOIS

"Class of '71"

OCCUPATIONAL PROGRAM ALUMNI

by

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with

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June, 1973

The Research reported herein was performed pursuant to a contract with the State of Illinois, Board of Vocational Education and Rehabilitation, Division of Vocational and Technical Education, Research and Development Unit. Contractors undertaking projects under such sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Board of Vocational Education and Rehabilitation position or policy.

STATE OF ILLINOIS
BOARD OF VOCATIONAL EDUCATION AND REHABILITATION
DIVISION OF VOCATIONAL AND TECHNICAL EDUCATION
RESEARCH AND DEVELOPMENT UNIT



PREFACE

Evaluation of the effectiveness of programs of occupational preparation is mandated by Congress in the Vocational Education Acts of 1963 and 1968. If occupational education is to be responsive to the changing needs of society, it must be monitored by an early warning system. The strengths and weaknesses of programs of employment preparation must be identified if they are to influence curricular modifications. Followup information, based upon the assumption that the former occupational student and his employer know the strengths and weaknesses of the program taken, is essential in assessing the effectiveness of occupational education in relation to program outcomes.

The Followup Project at Eastern Illinois University has developed and tested a system for delivering a continuous flow of uniform followup data to satisfy state and federal accountability requirements and assist state and local school personnel in decision making.

The project was funded through the Research and Development Unit of the Illinois Division of Vocational and Technical Education. Dr. Ronald McCage, Dr. Garth Yeager, and Mr. John Washburn of the Research and Development Unit staff have been of invaluable service to the project in offering advice and help whenever needed.

A unique aspect of the project has been the cooperative arrangement between the project staff, Research and Development Unit staff, and the Program Approval and Evaluation Unit staff of the D.V.T.E. Followup data was supplied to visitation team members participating in on-site evaluations under the



direction of the Program Approval and Evaluation Unit. Mr. James Galloway, Dr. John Klit and Dr. Tim Wentling assisted the project staff with that phase of activities.

The reader will be interested to note that students in 102 Illinois high schools were surveyed. This was approximately 20 percent of the secondary level schools with federally reimbursed occupational education programs. Of the 12,091 former occupational students surveyed, 46.4 percent provided usable followup data. Three thousand one hundred forty nine (3,149) employer/ supervisors were identified by respondents employed at the time of the survey and mailed survey instruments. Eighty-five percent (2,651) of the employer/ supervisors provided usable followup data.

The impact of this particular project is already being felt in terms of program change at Eastern Illinois University. Analysis of the data and inferences that can be drawn from the data will be of great interest to vocational educators throughout the nation. Mrs. Joyce Felstehausen, director of the project, has performed superbly in her position. She and members of her staff deserve much credit for their effort.

Charles L. Joley Coordinator, Occupational Teacher Education Eastern Illinois University



ACKNOWLEDGEMENTS

A project the scope of the Followup Project requires the assistance and cooperation of personnel from many disciplines and agencies. The individual and collective efforts made by these many individuals contributed greatly to this project. Their contributions are greatfully acknowledged.

Appreciation is expressed to Dr. Sherwood Dees, Director, State of Illinois, Division of Vocational and Technical Education for his acknowledgement of the importance of followup evaluation and his support of the project.

Dr. Ronald McCage, Coordinator, Dr. Garth Yeager, and Mr. John Washburn, Consultants of the Research and Development Unit have contributed greatly to the planning and execution of project activities. The assistance they provided members of the project staff was immeasurable and their commitment was largely responsible for the success of the project.

The ability and helpfulness of Dr. Charles Joley, Coordinator of Occupational Education, Eastern Illinois University, should be recognized for his service as administrative officer for the project. His support, along with the support of Dr. Harry Merigis, Dean of the School of Education, was sincerely appreciated.

Appreciation is also expressed to members of the Occupational Teacher Education Committee at Eastern Illinois University for their contributions to the direction of the project and their assistance in the preparation and refinement of survey instruments. Also acknowledged is the assistance of Dr. Paul Overton, Department of Educational Psychology and Guidance, Eastern Illinois University.



The special competences of Dr. Patrick Lenihan, Economics Department, Eastern Illinois University were welcomed and his contribution as statistical consultant to the project is lauded.

Many individuals served the project in a consulting role. Their contributions were invaluable in converting project intentions into effective actions. The following consultants played a vital role in the design of the system and development of project instruments:

Mr. James Galloway, Coordinator, Dr. John Klit, Assistant Coordinator, and Dr. Tim Wentling, Program Approval and Evaluation Unit, Illinois Division of Vocational and Technical Education, Springfield, Illinois.

Mr. Howard Avery and Mr. Lynn Troute, Special Programs Unit.-Guidance, Illinois Division of Vocational and Technical Education, Springfield, Illinois.

Dr. David Wheeler, Assistant Professor, Department of Industrial Education, Purdue University, Lafayette, Indiana.

Dr. Kathleen M. Howell, Chairman, Department of Home Economics, Otterbein College, Westerville, Ohio.

Mr. V. A. Jones, Executive Assistant to the Superintendent, Mr. Alfred J. Cocks, Mr. E. H. Riedel, and Mr. Dean Wunder, Vocational Counselors, Community High School District 88, Villa Park, Illinois.

Mr. John Garth, Director, Adult and Vocational Education, Urbana Community Schools, District 116, Urbana, Illinois

Mr. John Dowling, Principal, Watseka High School, Iroquois County Community District 9, Watseka, Illinois.

Dr. Alfred R. Hecht and Mr. Lynn Willett, Office of Institutional Research, Moraine Valley Community College, Palos Hills, Illinois.



Dr. Roland Spaniol, Director of the Computer Services Center, Eastern Illinois University provided office space, computer time, and other valuable assistance.

N. Jill Crewell of the Computer Center splendidly turned our data processing and analysis needs into realities. Without her competences the project could not have been completed. Mrs. Carole Hutchison served magnificently in her role of keypunching data from the followup instruments.

The special abilities of Mrs. Marcia Sherrick and Mrs. Nancy Wood in the preparation of the final manuscript were deeply appreciated. The team play of the project research assistants converted the game plan into the final score. Recognition goes to Mr. Ronald L. Garrity, Mr. Richard W. Koppitz and the project genie, Mrs. Genie O. Lenihan. They performed superbly.

We are indebted for the time consuming efforts of the administrators, contact people, and teachers in the 102 Illinois High Schools who participated in this study. To the respondents who participated in this study with the hope of contributing to future program improvement, we pledge that since you told us, we will listen.

Joyce L. Felstehausen Project Director



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COMPENDIUM

Summarized information presented in this compendium is to facilitate the reader in quickly persuing salient findings of the study. Since the purpose of the Followup Project was twofold, findings and recommendations that are related to improving the followup system will be separated from those related to improving the effectiveness of occupational education in Illinois. This section of the report will be divided into the following parts: context of the survey; findings and recommendations related to the followup system; and findings and recommendations related to improving occupational education in Illinois.

CONTEXT OF THE SURVEY

Twelve thousand twenty one (12,021) "Class of '71" unduplicated occupational program alumni from 102 Illinois high schools were polled for questionnaire data. This was approximately 20 percent of the total Illinois 1971 occupational program completions. The U.S. Postal Service returned 6.6 percent of the mailed instruments as undeliverable. Five thousand two hundred three (5,203) responses were usable for data analysis. This was 46.4 percent of the alumni who were assumed to have received survey instruments and constituted nine percent of the total Illinois 1971 program completions. The sample was representative of Illinois geographical regions and occupational program areas.

Responding alumni employed at the time of the survey were asked to provide the name and business address of their employer or supervisor. Three thousand one hundred forty-nine (3,149) employer/supervisors were identified and polled for questionnaire data. Eighty-five percent (2,651) responded.



The followup study focused on six principle dimensions in evaluating occupational program effectiveness in Illinois: the basis upon which students made occupational decisions; the post-high school status of occupational program completers; employment experience of program completers; their assessments of the contribution of the training to their employability and their recommendations for program improvement; employer/supervisor appraisals of employee preparation for employment; and entry level personal qualities and job skills considered important for employment.

In order to avoid broad generalizations about occupational training, findings have been reported by program areas as well as by the total for all program areas. An attempt was made to determine the effect of program area and training related employment on alumni assessments of training effectiveness and recommendations for program improvement. Multiple linear regression techniques were used for this analysis.

FINDINGS AND RECOMMENDATIONS FOR IMPROVING THE FOLLOWUP SYSTEM

Finding: The definition of an occupational program varies from school to school. Because of this variation, a student who is taking one course or several unrelated courses is often undistinguishable from a student who is pursuing a sequence of occupational courses as his/her major field of study. Many LEA's have not yet established occupational course sequences leading to career objectives. In addition, a majority of the LEA's do not have the type of pupil records subsystem that facilitate obtaining names and addresses of identified occupational program completers with a minimum of staff involvement. As a result, the identification of former students who completed occupational



and expensive process.

programs and the procurement of their mailing addresses was a time consuming

Recommendation: If the effectiveness of programs of occupational instruction is to be assessed using followup techniques, those programs must be defined and standard terminology and O.E. Code numbers used to identify them. A pupil record subsystem must be designed, tested, and implemented for the identification of those individuals who have completed specified programs or sequences of occupational courses for the purpose of developing marketable entry level employment skills or pursuing further related educational avenues.

<u>Finding</u>: Some of the computer software needed to fully automate the Followup System is not presently available. This is due, in part, to the time consumed by developmental project activities for the identification of various users of followup data and formats that would facilitate data reporting.

Recommendation: A second phase of the project be funded for the primary purpose of developing additional software to process and analyze data and prepare reports. This activity should be conducted in close cooperation with the Management Information System presently under development to insure its future integration as a subsystem.

<u>Finding</u>: The present followup time frame does not make data available to users at an appropriate time.

<u>Recommendation</u>: During the second phase of the project, a time frame must be established that would allow data to be collected, processed, analyzed and made available to decision-makers at appropriate times.

<u>Finding</u>: The technique employed in this study for measuring the relatedness of employment at the time of the survey to the occupational training taken proved to be valid and reliable but is too expensive and time consuming to be practical. It is not possible to computerize the process.



Recommendation: Alternative ways need to be examined for determining the relatedness of subsequent employment to training taken. In order to be feasible, a decision model must be developed that will assure validity and reliability in the measurement of relatedness as well as allow for computerization of the process.

FINDINGS AND RECOMMENDATIONS FOR IMPROVING OCCUPATIONAL EDUCATION IN ILLINOIS Finding: The educational decisions related to career objectives made by high school students tend to be left to chance. While there is much verbal support and developmental activities for exploration of the world of work, occupational information, and occupational orientation, evidence shows that these concepts have not yet had much influence upon secondary level students.

Recommendation: A massive infusion of career development education into the daily instruction of all subject matter at the junior and senior high school level is needed to develop realistic knowledge about available jobs and career decision making and planning skills. Attention needs to be given in the junior high school curriculum to developing a readiness for making tentative career decisions. Youth need the kind of exposure to the world of work that will help them know what kinds of jobs they might obtain at different educational spin-off levels, what types of skills and knowledge are required to successfully perform and advance in these jobs, and what kind of further educational avenues they might need to pursue.

<u>Finding</u>: While at the time of the survey only 6.4 percent of the unemployed respondents were actively seeking a job, active high school placement services could have benefited many of the former occupational students. Many respondents indicated a need for the assistance of school personnel in obtaining and re-obtaining employment when necessary.



Recommendation: The local school district should provide placement service for every student leaving school for the world of work. Each student should be given assistance, if desired, in finding initial employment. Beyond initial placement, school personnel should be available to assist former students in adjusting to the job and in obtaining any needed new job placement for a specified period of time. Placement responsibility should be shared by both counseling and occupational instruction personnel. Schools that cannot place their former students should seek the reason why.

Finding: The overall percentage of respondents who were found in training related employment at the time of the survey was low. However, respondents were generally well satisfied with their jobs. Satisfied alumni were thought of by their employer/supervisors as well suited for their jobs. Respondents indicated a preference for cluster oriented employment preparation and felt more emphasis should be placed upon the common job skills and related basic knowledge needed by all workers.

Recommendation: The emphasis given training related employment as an evaluative criteria should be carefully reconsidered. Use of other criteria-particularily at the secondary level--should recognize such considerations as:

- students enroll in programs for reasons other than career interests,
 e.g., easiest route to a diploma or attractive alternatives are not open so the least unattractive curriculum is selected;
- 2. youth often change their career interests; and
- students may gain broad skills and attitudes which enable them to perform in a broad spectrum of occupations.

Other criteria which may be more useful than related employment for determining curricular modification might include job satisfaction, alumni assessments of program effectiveness and recommendations for program improvement, and employer



appraisals of employment preparation and identification of important entry level skills.

Finding: Alumni respondents found their employment preparation programs to be most effective in preparing them to use job tools and equipment but recommended that training could be more realistic--more like the real job. Employer/supervisors rated alumni as less prepared in this aspect of employment than in several other aspects.

<u>Recommendation</u>: Occupational instructional programs need to be developed from a careful and systematic analysis of the job tasks performed on each level of an occupational cluster. Skills and the related technical information taught need to be realistic in terms of what is required to perform successfully on the job. Provisions must be made for the constant reevaluation and modification of curricular content in light of changing job requirements.

<u>Finding</u>: Alumni respondents found their employment preparation to be least effective in preparing them to interact with the public to be served, handle new or unpleasant job situations and talk to the boss about job problems. Employer/supervisors indicated the ability to get along with others as an important entry level skill.

Recommendation: Emphasis should be placed on identifying human interaction skills needed by workers in the occupational clusters and instructional methods for teaching these skills should be devised, tested and implemented. Teachers should be prepared at both the pre-service and in-service levels to teach these skills.

<u>Finding</u>: Employer/supervisors of employed respondents responded well to the survey request for program assessment. They were generally well pleased with the product of occupational education in Illinois. Illinois occupational



programs must provide basic enough preparation for the type of entry level positions program alumni obtain.

Recommendation: The willingness of employer/supervisors to participate in an evaluative role for the improvement of occupational education should be built on by local school personnel throughout Illinois. The involvement of these employment representatives who are knowledgeable about the needs of a technical society should be sought. Their advice and counsel on worker qualifications, training needs, job placement and program evaluation could have great impact on the improvement of those programs that utilize their competence.



CHAPTER I

INTRODUCTION

Occupational education as defined by the Vocational Education Act of 1963 and 1968 Amendments is to provide skills and knowledge which will enable youth and adults to enter in or advance within a specific occupation or group of related occupations which require less than a baccalaureate degree. Evaluation of programs of occupational education is mandated by the same legislation.

National advisory committees on vocational education since 1938 have continually identified the lack of systematic followup of students after graduation or placement as a weakness in need of attention.

The technique of assessing the quality of program products via followup survey is believed to be an essential component of an evaluation system. Followup assessment is viewed by many as an important element in improving the responsiveness of occupational education to the needs of society. In early 1972, the Illinois Division of Vocational and Technical Education (hereafter referred to as the I.D.V.T.E.) Research and Development Unit cortracted with the Center for Educational Studies at Eastern Illinois University to develop and test a system which would deliver followup data on a continuous basis. This continuous flow of uniform data is needed to replace the sporadic and isolated research activity of the past. The data will facilitate the establishment of priorities for the allocation of fiscal resources and guard against ineffective or misdirected educational programs.

The initial study design underwent modifications for a number of reasons.

The survey sample was to consist of a population of "Class of '71" occupational



advisory personnel in local schools it became apparent that this approach was not feasible. After consultation with I.D.V.T.E. personnel, it was decided that followup procedures be designed to be initiated by the I.D.V.T.E. rather than the local districts. Survey results would then be transmitted back to the local districts. This approach will assist LEA personnel in evaluating program outcomes and enable them to devise better educational strategies and programs.

DEFINITIONS

The terminology and definitions—in effect, a language of communication—concerning different components of career education are in a state of flux. In order to communicate specific information concerning the scope of this project the following definitions, taken from <u>Standard Terminology for Curriculum and Instruction in Local and State School Systems</u> (U.S.O.E. publication, 1970), were adopted:

<u>Course</u>--An organization of subject matter and related learning experiences provided for the instruction of pupils on a regular or systematic basis, usually for a predetermined period of time (e.g., a semester, a regular school term, and a 2-week workshop). Credit toward graduation or completion of a program of studies generally is given pupils for the successful completion of a course.

<u>Vocational Course</u>--A course approved under State Plan requirements for vocational and technical education.²

A program of studies--is a combination of related courses and/or self-contained classes organized for the attainment of specific educational objectives e.g., a program of special education for handicapped, a college preparatory

²Ibid., p. 62 (X 02 45.21)



lu.s. Office of Health, Education, and Welfare; National Center for Educational Statistics, <u>Standard Terminology for Curriculum and Instruction in Local and State School Systems</u> (Washington, D.C.: U.S. Government Printing Office, 1970), p. 62 (X 02 45.20).

* program, an occupational program (in a given occupation or cluster of occupations), a general education program, and a transfer program.

Occupational training program--A secondary school, junior college, or an adult education program of studies designed primarily to prepare pupils for entrance into a specific occupation or cluster of occupations. This includes aspects of programs such as "vocational education", "cooperative on-the-job training."4

A program completion--is an individual who has completed a program.

OBJECTIVES

Study objectives were predicated on the assumptions that: (1) the basic purpose of career education curriculum is to insure gainful employment in a specific or related occupation; 6 if the graduate cannot be placed in the field for which he is prepared something is wrong, 7 and (2) the graduate and his employer know the strengths and weaknesses of the program of employment preparation. 8 The overall objectives of the project were to:

1. Design and develop a system to gather, process and interpret followup data in formats usable by local vocational administrators with emphasis

³Ibid., p. 42.

⁴<u>Ibid.</u>, p. 88 (X 21 43.10)

⁵<u>Ibid.</u>, p. 88 (X 21 43.30)

⁶Professional and Curriculum Development Unit. <u>A Research Model for Curriculum Development in Vocational/Technical Education</u>, pg. 35.

⁷Rupert N. Evans, Garth L. Mangum, and Otto Pragan. <u>Preparation For Employment: The Background and Potential of the 1968 Vocational Education Amendments</u>. Ann Arbor, Michigan: Institute of Labor and Industrial Relations, The University of Michigan - Wayne State University Washington, D.C.: National Manpower Policy Task Force, May, 1969, pg. 55.

on followup of students after graduating, completing, a program, or dropping out to determine (a) relatedness between any training program and any employment situation, and (b) to measure the effectiveness of occupational programs.

2. Test the system by conducting an extensive in-depth followup study to determine the impact of occupational training programs on post-high school employment experiences, individual career development, and readiness for employment of students completing occupational programs in those schools scheduled for evaluation in FY 1973 under the DVTE Three Phase System for Statewide Evaluation of Occupational Education Programs.

CHARACTERISTICS OF THE DESIRED SYSTEM

In order to meet various state and local needs for data on program effectiveness the desired system should:

- Provide information on program outcomes rather than processes;
- Enable measurement of the progress of efforts toward achieving program objectives;
- 3. Provide feedback of followup data in formats usable by local vocational administrators and instructional personnel; and
- 4. Provide followup data to meet the needs of state personnel in reporting statewide data and determining educational needs and priorities.



CHAPTER II

PROCEDURES

INTRODUCTION

Programs of occupational training by nature differ in course content and physical facilities because they reflect the unique characteristics of dissimilar geographic areas. Therefore, it was necessary to identify characteristics which are common to successful occupational education programs, regardless of level, setting or location. Instruments and procedures for assessing program effectiveness can be designed only when these common objectives have been identified.

Based on the findings of literature review, meetings and interviews with occupational educators and utilization of special consultants, goal statements were formulated which reflected common characteristics of occupational education programs in the state of Illinois. Design of study survey instruments was predicated on the following assumptions concerning occupational education in Illinois:

Curriculum

- 1. The curriculum is designed to provide students opportunities to acquire and practice manipulative skills, technical knowledge, and related subject matter essential to qualify them for employment.
- 2. The curriculum provides opportunities for the development of competence in using tools, machines and materials of the occupation.
- 3. In programs to prepare students for entry into an occupation, the curriculum is designed to develop required abilities, including:



Requisite skills and knowledge, desirable work habits and attitudes, pride in workmanship, habits of occupationally acceptable personal grooming and dress, understanding appropriate employer-employee-customer relationships, knowledge of personal and business ethics, necessary communication skills, and habits of good health and safety practices.

- 4. Curricular content is based upon current employment practices.
- 5. The curriculum is planned to be articulated with advanced technical post-high school programs, as well as to provide training for entry employment in specific occupations.

Instruction

- Occupational instruction develops to a marketable degree the abilities required by the occupation and the abilities to reason, solve problems, think independently, and make judgments necessary for employment in the chosen occupation.
- Care is taken to assure that students understand and can meet licensing requirements, union memberships and other factors that may affect their employability.
- 3. Employment instruction includes such topics as: How to seek and obtain employment, social security, workman's compensation, the preparation of applications and resumes, the acquisition of personal tools and equipment, appropriate grooming, employment testing, and social and attitudinal skills neceasary for obtaining employment and for advancing on the job.

Vocational Guidance

 Students have had early occupational orientation and experience vital to making immediate and long range career decisions.



- Students are enrolled in occupational programs in which they have reasonable chance for successful completion and probability of successful employment.
- 3. The student's occupational program is planned around his career objective.

ALUMNI SAMPLE

Personnel from the Program Approval and Evaluation Unit of the I.D.V.T.E. requested that the followup sample consist of program completions from the secondary schools scheduled for on-site evaluation under the unit's Three Phase Evaluation System. Summarized followup data would then be available to members of the visitation teams to assist them in identifying target areas for evaluation of a school's occupational training programs.

Occupational alumni from the "Class of '71" would comprise the alumni population. The majority of occupational programs in Illinois under the 1968 Amendments to the Vocational Education Act of 1963 became operational in 1970. Therefore, 1971 would be the first class with alumni completing an occupational training program sequence.

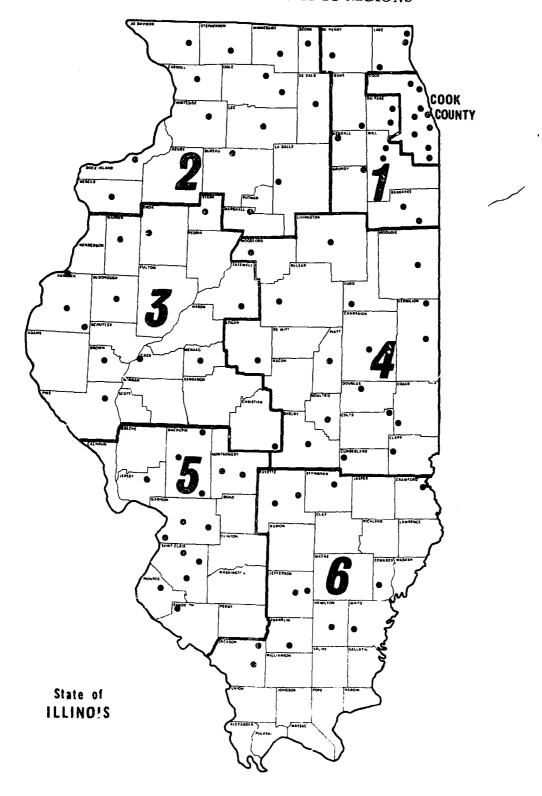
Illinois is divided into six geographical regions. Region I, which includes Cook County, has two regional directors (one for Cook County and one for the rest of the region). In this study, Cook County was treated as a separate region. Under the Three Phase Evaluation System, approximately one-fifth of those school districts receiving reimbursement for occupational training programs are scheduled for on-site visitation each year. The Regional Director in each region selects the schools to be evaluated. In the selection process, efforts were made to see that schools were geographically distributed throughout the region. (See Figure 1)

A flyer describing the followup project accompanied the official notice of visitation that was sent to the LEA's scheduled for evaluation in FY 1973. A



FIGURE 1

GEOGRAPHIC DISTRIBUTION OF SCHOOL DISTRICTS
PARTICIPATING IN THE SURVEY BY REGIONS





week later each of the individual school superintendents was mailed an introductory letter from the followup project director and asked to name a contact person within the school system if the LEA desired to participate in the study. Ninety-one of the 96 secondary school districts scheduled for evaluation participated in the study representing 102 individual schools (See Table 1). Reasons for not participating were: no program completions for the specified year, followup had already been done on "Class of '71" students, school personnel preferred to do their own followup survey, or personnel changes made it impossible to participate.

TABLE 1
SUMMARY OF SCHOOLS PARTICIPATING BY REGION

Region	Number of Secondary Districts Being Evaluated	Number of Districts Participating in Followup Study	Number of Individual Schools
Cook County	, 8	7*	12**
Region I	14	13	16
Region II	15	15	18
Region III	14	13	13
Region IV	18	17	17
Region V	14	14	14
Region VI	13	12	12
	96	91	102

^{*}While all City of Chicago Schools are in one school district, only four of the secondary schools Were scheduled for evaluation in FY 1973. Three of the four schools chose to participate in the survey.

Table 2 compares the sample to the total program completions in Illinois by program areas for the 1970-71 school year. The evaluation cycle is planned so that every school receiving federal reimbursement is evaluated once every five years. Survey questionnaires were mailed to approximately 20 percent of the total Illinois occupational program completions. All <u>unduplicated</u> "Class of '71" occupational training program alumni whose names and usable addresses



^{**}Some school districts have more than one high school participating in the survey.

were provided by participating school personnel were mailed survey instruments.

Five program areas are recognized by the I.D.V.T.E. for occupational programs in Illinois. One of the problems encountered by LEA's in the O.E. Coding of occupational training programs was the non-existence of an appropriate code to designate "interrelated" or "cooperative work experience" programs.

Many LEA's used either a general 01.0000, 04.0000, 07.0000, etc., code or a 01.9900, 04.9900, 07.9900, etc., code to designate such programs. Other LEA's used the Code Number 18.9900 which is a number designating a Special Program--Secondary Level. This does not allow for classification of the specific program area in which the student was trained. As a result, a sixth category--Special Programs was utilized to report the findings for programs coded 18.9900. Programs coded within a program area (01.0000 or 01.9900) were included in the appropriate program area but measuring the relatedness of the training taken to subsequent employment was not always possible because of the broad nature of these code numbers.

The largest number of questionnaires sent by program area was to alumni of Business, Marketing and Management occupational programs (49.2 percent). Industrial programs accounted for 34.4 percent of the alumni sample. The remaining 16.4 percent of the questionnaires sent were to alumni of all other program areas. (See Table 2)

In this document, the following abbreviations appear at the head of data column when findings are reported by program areas:

AGRI BUS: Applied Biological and Agricultural Occupations

BUS OCC : Business, Marketing and Management occupations (includes

Distributive Occupations)

HLTH OCC : Health Occupations

IND OCC : Industrial Oriented Occupations

P&P SERV: Personal and Public Service Occupations

SPEC PROG: Cooperative Work Experience of interrelated on-the-job

training programs under the O.E. Code 18.9900 in which the

specific job for which trained was not identified

STATE: Total for all programs in Illinois



TABLE 2
SURVEY SAMPLE AS COMPARED TO TOTAL PROGRAM COMPLETIONS
IN ILLINOIS (FY 1971) BY PROGRAM AREA

	Illinois completions*		Sent**		Usable Response	
Program Area	Number	%	Number	%	Number	%
Total BUS OCC	34,369	56.0	5,912	49.2	2,787	53.6
Total IND OCC	17,237	28.1	4,133	34.4	1,607	30.9
Total P&P SERV	4,662	7.6	553	4.6	259	5.0
Total AGRI BUS	4,123	6.7	542	4.5	223	4.3
Total HLTH OCC	954	1.6	298	2.5	160	3.1
Total SPEC PROG, N.E.C.***	0	0.0	582	4.8	167	3.2
GRAND TOTAL	61,372	100.0	12,020	19.6ª	5,203	8.9b

^{*}Taken from O.E. Form 3139, Illinois, Secondary level, dated 5 '71

Table 3 summarizes the response rate of alumni to the survey by regions. Column 2 represents the percentage of questionnaires returned by the U.S. Postal Service as undeliverable. The number of questionnaires postally returned was subtracted from the number of questionnaires sent to determine the number of questionnaires assumed received. The response rate was calculated using this adjusted number. Column 4 represents the percentage of responses received that were unusable due to inaccurate or incomplete data. It was discovered that some schools included other than "Class of '71" program alumni. Two schools



^{**}All unduplicated "Class of '71" occupational program alumni whose names and addresses were provided by local districts were mailed survey instruments.

^{***}N.E.C.--"Not Elsewhere Classified", are Cooperative Work Experience or Interrelated on-the-job training programs under the O.E. Code 18.9900. The specific program areas in which training was taken was not specified.

^aPercent of Grand Total completions (column 1)

bPercent of Grand Total completions (column 1)

participating in the survey sent only "Class of '72" alumni and these responses were coded non-usable in order to keep the sample as originally specified. The percentage of usable alumni responses to the survey was 46.4 percent.

TABLE 3
ALUMNI RESPONSE RATE BY REGION

Region	Number of Questionnaires Sent	Percent Postally Returned	Number of Responses	Percent of Nonusable Responses	Percent of Usable Responses
Cook County	3,547	9.41	1,411	2.83	42.67
Region I	2,571	5.52	1,152	5.03	45.C3
Region II	1,638	4.95	781	9.22	45.51
Region III	918	4.47	480	2.78	53.36
Region IV	1,306	4.59	609	8.05	45.27
Region V	1,195	6.44	630	2.22	55.19
Region VI	846	6.38	394	2.04	48.73
State Totals	12,021	6.56	5,457	4.65	46.36

EMPLOYER/SUPERVISOR SAMPLE

Responding alumni employed at the time of the survey were asked to provide the name and business addresses of their employer or supervisor. Three thousand one hundred and forty-nine (3,149) employer or supervisors were identified and mailed survey instruments. Table 4 summarizes the employer response by region.

TABLE 4
EMPLOYER RESPONSE RATE BY REGION

Region	Number of Questionnaires Sent	Number of Postal Returns	Number of Responses	Percent of Responses
Cook County	848	13	677	81.1
Region I	731	6	613	84.6
Region II	447	0	384	85.9
Region III	250	1	214	85.9
Region IV	370	0	324	87.6
Region V	306	3	267	88.1
Region VI	197	1	172	87.8
State Totals	3,149	24	2,651	84.8



Employer/Supervisors polled responded well to the request for help in evaluating occupational program effectiveness. This high response rate appears to indicate that employers are willing to participate in evaluating the preparation for employment that is provided for students in secondary programs.

DEVELOPMENT AND USE OF SURVEY INSTRUMENTS

Design of survey instruments was predicated on the statements reflecting common characteristics of occupational training programs in the state of Illinois. These statements were presented in the first section of this chapter.

One indication of a successful occupational training program is the ability of the training institution to develop occupational competency in students.

Indications that this objective has been reasonably achieved are:

- Program completions obtain, hold, and advance in jobs related to their preparation;
- Program completions feel that their preparation has been relevant to their employment needs;
- Employers feel program completions have been well prepared for their job;
- 4. Program completions feel satisfied with their jobs;
- 5. Program completions recommend the program to others; and
- 6. Negative (undesirable) outcomes are minimal. Negative outcomes and indices of negative outcomes include:
 - a. program completions and/or employers of program completions express dissatisfaction with preparation received.
 - b. program completions' job performance is unsatisfactory, and/or
 - c. program completions fail to obtain or hold a job in the field of preparation.

Followup data measuring the progress of occupational training programs toward achieving general objectives should include:



- Employment status: employed, unemployed, never employed, not available to the labor force;
- Field of employment: related, somewhat related, not related, not employed;
- 3. Job mobility profile;
- 4. Education since leaving high school;
- 5. Satisfaction with job held; and
- 6. Satisfaction with occupational preparation provided by the training institution.

The survey instruments were designed to collect data usable by administrators at both state and local levels. Survey instruments were originally developed in doctoral research at The Ohio State University. Personnel from The Center for Vocational and Technical Education reviewed and verified data items. From May 15, 1971 through August 31, 1971, personnel in the School of Home Economics at Eastern Illinois University under contract with the Research and Development Unit of the I.D. V.T.E., conducted an exploratory study of Illinois Cooperative Home Economics Occupational Program graduates. This study was designed to test the use of certain procedures and instruments for possible use in a statewide investigation of all occupational training programs. Revisions were made to adapt the instruments to all five occupational program areas. Revised instruments were reviewed by I.D.V.T.E. personnel in the Research and Development, the Program Approval and Evaluation, and the Special Programs -- Guidance units and by guidance and administrative personnel in small, medium and large school districts. The alumni instrument was then pilot tested using former occupational students from the different program areas. Further refinements were made to accomodate suggestions made by reviewers and the pilot test group.

The Educational Testing Service on behalf of the State of Illinois Advisory

Council on Vocational Education reviewed survey instruments and procedures



developed for followup study. The review of the followup materials was quite favorable. The report of the study states:

"The follow-up procedures that were prepared for pilot use by the Center for Educational Studies at Eastern Illinois University include many of the features that should be found in good follow-up instrumentation."

DATA COLLECTION

Three mailings were utilized to obtain maximum response. The first request consisted of a cover letter from the local school district, a survey instrument and a stamped addressed return envelope. A reminder postcard to nonrespondents was sent ten days after the initial mailing. After another ten day interval, a third mailing consisting of a second copy of the questionnaire, local district cover letter, and stamped return envelope was posted to nonrespondents. Mailing procedures were the same for both alumni and employer/supervisor populations. (See Appendix D for instruments, cover letters and postcard reminders.)

PROCESSING OF DATA

Returned instruments were reviewed and coded for processing. Data was then keypunched. When an alumni indicated leaving school in a year other than during or upon completion of the 1970-71 school year, the LEA contact person was asked to verify the date of completion or leaving school. In cases where the leaving date was not consistent with the specified survey requirements, the response was considered non-usable.



Daniel P. Norton,, and Donivan J. Walley,, The Efficiency and Efficacy of Evaluation Practices of the Illinois Division of Vocational and Technical Education--Final Report (Evanston, Illinois: Educational Testing Service, December 21, 1972), p. 83.

CHAPTER III

DESCRIPTION OF ALUMNI RESPONDENTS

The major purpose of the followup survey was to determine the status of occupational program completions after one year's availability to the labor force. However, some data concerning the characteristics of the sample were gathered. This general information is presented in this chapter.

RESPONSE RATE OF ALUMNI POPULATION

Alumni of Health Occupations programs responded best (53.7 per cent).

Business, Marketing and Management alumni responded at a 47.1 percent rate and Personal and Public Services alumni at a 46.9 percent rate. Only 28.3 percent of the Special Programs (Interrelated, CWE, etc.) alumni responded. (See Table 5.) Alumni from Region V responded above state averages in all program areas.

Region III alumni responded above state averages in all but the Business,

Marketing, and Management Occupations program area. The overall response rate for Cook County and Region IV alumni was below the state average.

STATUS OF RESPONDENT WHEN LEAVING HIGH SCHOOL

One of the characteristics desired in design of the alumni survey instrument was that alumni leaving school prior to graduation could complete the questionnaire as well as high school graduates. For the study, an occupational training program completion was defined as an individual who completed an occupational training program and (1) graduated from high school, or (2) left school without graduating. Therefore, dropouts of programs were not followed up but those members of the "Class of '71" who completed a program and left school without graduating were included.



Table 6 shows that only 1.4 percent of the respondents had completed an occupational training program and left school without graduating. This number was not large enough to allow separate reporting of findings and so they are included in other tables with graduates of high school. Approximately 10 percent of those completing Special Programs (Cooperative Work Experience or Interrelated Programs not classified by specific program codes) left school prior to graduating. Only 1.8 percent of these alumni indicated they left school to enter the labor force. Another 6.8 percent gave "personal reasons" or "didn't like school" as reasons for not completing high school. The other 1.2 percent left school to enter another school or training program. Approximately 99 percent of the respondents were high school graduates.

SEX

In the total sample (See Table 6), females constituted 54.6 percent of the population, males 45.3 percent. Applied Biological and Agricultural Occupations (Agri. Bus.) and Industrial Oriented Occupations (Ind. Occ.) were typically male program areas. Typically female program areas included Health Occupations (Hlth. Occ.) and Personal and Public Service (P&P Serv.). With the exception of some programs in the Business, Marketing, and Management Occupations (Bus. Occ.) program completions were generally female. (See Table 7 for exceptions.) Males predominated in Special Programs but not to the extent that it could be considered an area in which one sex or another generally enrolled.

9

SPECIFIC PROGRAMS' COMPLETED

Two hundred and thirteen specific occupational training programs are recognized by the I.D.V.T.E. in the publication <u>Vocational and Technical</u>

<u>Education: Descriptions, Definitions and O.E. Coding.</u> For the purpose of clarity, programs are reported in Table 6 by subject matter and principal



TABLE 5

RESPONSE RATE* BY PROGRAM AREA, REGION AND STATE

				Rec	jions			
Program Area	Cook Co. %	I %	II %	III %	IV %	V %	VI %	State %
HLTH OCC	53.5	55.6	52.6	59.5	58.6	100.0	40.7	53.7
BUS OCC	42.8	47.9	46.3	60.1	43.2	54.0	51.5	47.1
P&P SERV	40.5	47.3	48.1	46.7	40.0	51.2	55.9	46.9
AGRI BUS	50.0	57.9	29.8	49.2	35.6	45.3	34.6	41.1
IND OCC	35.0	34.9	40.3	42.1	45.1	48.7	40.7	38.9
SPEC PROG	19.6	30.2	38.8	50.0	33.7	76.9	31.8	28.7
Percentage by Region	38.7	42.6	43.3	50.9	38.7	51.6	45.6	43.3

^{*}Not adjusted to exclude postal returns.

TABLE 6
CHARACTERISTICS OF RESPONDENTS BY PROGRAM AREA

		AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE %	
1.	Graduate Status Graduated	98.7	99.1	98.7	98.8	96.9	90.2	98.6	
	Completed program; did not graduate	1.3	0.9	1.3	1.2	3.1	9.8	1.4	
	Number respond	ing 223	2764	159	1589	257	163	5155	
2.	<u>Sex</u> Male	98.7	19.5	4.4	90.2	10.4	68.9	45.3	
	Female	1.3	80.5	95.6	9.8	89.4	31.1	54.6	
	Number respond	ing 223	2786	160	1604	259	167	5199	



segment (first four digits in the O.E. Code, e.g., O1.01) with the exception of Home Economics Occupations (gainful) and Technical Education which need six digits to specify training program. Since the 74 principle programs identified by LEA's participating in the survey would be unwieldy, findings are reported in the rest of this document by the six program areas described in Chapter 2.

ENCOURAGERS TO ENROLL IN OCCUPATIONAL TRAINING PROGRAM

Approximately one-half of the respondents indicated <u>no one</u> encouraged them to enroll in the occupational training program they completed (46 percent). Program selection was influenced by school personnel (Table 7, rows three and four combined) in 20.3 percent of the cases. Parents, guardian, or other family member were identified as influencers by 20.2 percent of the respondents. Peer group encouragement (rows five and six combined) was indicated by 11. 5 percent of the respondents.



TABLE 7
SEX OF RESPONDENTS BY PROGRAM TAKEN

O.E. Program Code	Program Title	Male %	Female %	Number in State
AGRI BUS				
01.00	Applied Biological & Agricultural Occupations	100.0	0.0	26
01.01	Agicultural Production	96.2	3.8	106
01.02	Agricultural Supply & Services	100.0	0.0	10
01.03	Agricultural Mechanics	100.0 100.0	0.0 0.0	36 2
01.04 01.05	Agricultural Products Ornamental Horticulture	91.7	8.3	12
01.05	Agricultural Resources	100.0	0.0	8
01.00	Forestry	100.0	0.0	ĭ
01.99	Agriculture; Other	100.0	0.0	22
BUS OCC				
04.00	Distributive Education	32.7	67.3	52
04.01	Advertising Services	100.0	00.0	1
04.02	Apparel & Accessories	50.0	50.0	2
04.03	Automotive	100.0	00.0	3
04.06	Food Distribution	16.7	83.3	12
04.08	General Merchandise	48.3	51.7	87
04.09	Hardware, Building Materials, Farm & Garden Supplies & Equipment	00.0	100.0	2
04.10	Home Furnishings	100.0	00.0	ī.
04.20	Retail Trade; Other	80.0	20.0	20
04.99	Distributive: Other (Businesses not			
	Classifiable as either Wholesale or			
	Retail)	42.5	57.5	179
14.00	Office Occupations	07.7	92.3	91
14.01	Accounting & Computing Occupations	44.0	56.0	489 91
14.02	Business Data Processing Systems Occupations Filing, Office Machines, & General Office	40.7	59.3	91
14.03	Clerical Occupations	05.5	94.5	381
14.04	Information Communication Occupations	33.3	66.7	3
14.05	Materials Support Occupations	71.4	28.6	7
14.06	Personnel, Training, & Related Occupations	50.0	50.0	2
14.07	Stenographic, Secretarial, & Related			
14 00	Occupations Supervisory & Administrative Management	02.1	97.9	906
14.08	Occupations	72.7	27.3	11
14.09	Clerk-Typist	14.9	85.1	269
14.99	Office Occupations; Other (n.e.c.)	12.2	87.8	139
16.0117	Scientific Data Processing	34.2	65.8	38
SPEC PRO	G			
18.99	Special Program, Secondary	68.9	31.1	167



O.E. Program Code	Program Title	Male %	Female %	Number in State
HLTH OCC 07.00 07.01 07.02 07.03 07.04 07.05 07.09 07.99	Health Occupations Dental Medical Laboratory Technology Nursing Rehabilitation Assistant Radiologic Miscellaneous Health Occupations Health Occupations; Other	05.6 00.0 100.0 01.8 33.3 00.0 08.3 09.1	94.4 100.0 00.0 98.2 66.7 100.0 91.7 90.9	18 1 1 112 3 2 12 11
P&P SERV 09:00 09:0200 09:0201 09:0202 09:0203 09:0204 09:0205 09:99 17:26 17:29	Home Economics Occupational Preparation Care and Guidance of Children Clothing Management, Production, & Services Food Management, Production, & Services Home Furnishings, Equipment, & Services Institutional & Home Management & Supporting Services Occupational Preparation; Other Personal Services (Cosmetology) Quantity Food Occupations	00.0 05.7 00.0 00.0 19.4 00.0 00.0 08.0 07.3 54.2	100.0 94.3 100.0 100.0 80.6 100.0 100.0 92.0 92.7 45.8	4 35 37 26 36 14 17 25 41 24
IND OCC 16.0100 16.0103 16.0105 16.0108 16.06 17.00 17.01 17.02 17.03 17.04 17.07 17.09 17.10 17.13 17.14 17.15 17.19 17.23 17.27 17.31 17.33 17.36 17.99	Engineering Related Technology Architectural Technology Chemical Technology Electronic Technology Miscellaneous Technical Education (n.e.c.) Trade and Industrial Occupations Air Conditioning Appliance Repair Automotive Services Aviation Occupations Commercial Art Occupations Commercial Photography Occupations Construction & Maintenance Trades Drafting Industrial Electrician Electronics Occupations Graphic Arts Occupations Metalworking Plastics Occupations Small Engine Repair, Internal Combustion Textile Production & Fabrication Upholstering Woodworking Trade and Industrial Occupations (n.e.c.)	100.0 100.0 100.0 100.0 50.0 71.2 100.0 85.7 96.6 93.8 40.5 50.0 99.2 95.8 92.3 99.3 89.4 100.0 90.9 41.2 100.0 69.6	00.0 00.0 00.0 00.0 50.0 28.8 00.3 03.4 06.3 59.5 50.0 04.2 07.7 10.6 00.0 100.0 09.1 58.8 00.0 30.4	8 6 1 15 2 66 4 7 236 16 37 4 133 288 26 142 94 236 4 11 17 1 46 204



TABLE 8

SOURCE OF ENCOURAGEMENT TO ENROLL IN OCCUPATIONAL TRAINING BY PROGRAM AREA

Encouragers	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	PÅP SERV %	SPEC PROG %	STATE %
No one	43.7	46.6	40.8	46.7	44.9	39.3	46.0
Parent(s), guardian, or family member	24.6	22.9	13.6	16.4	15.7	17.2	20.2
Guidance counselor or administrator	9.6	9.8	15.0	12.3	16.1	21.4	11.4
A teacher	11.1	8.4	9.5	9.5	9.3	6.2	8.9
A student who took the program	5.0	4.7	9.5	6.2	5.9	11.0	5.6
A friend	4.0	5.6	10.9	6.6	5.5	4.1	5.9
Other	2.0	1.9	0.7	2.4	2.5	0.7	2.0
Number responding	199	2553	147	1427	236	145	4707



CHAPTER IV

POST HIGH SCHOOL EXPERIENCE OF ALUMNI RESPONDENTS

INTRODUCTION

In assessing the progress of occupational education toward meeting Congressional mandates set forth in the Vocational Education Amendment of 1968, data on the post high school experience of program completions must be considered. Larson reports that quality programs of employment preparation grow out of the needs of people. If individuals can be taught how to work and be provided with employment skills, knowledges, habits and attitudes in keeping with the needs of employers, the costs of welfare and institutional care will be diminished. Swanson observed that vocational education has little value to the individual or to the economy unless the skills which are learned enable a person to obtain and hold a job. Students must be able and willing to perform services and produce products which are in demand in the labor market.²

Under the broad concepts of occupational training in Illinois, students should be encouraged to enroll in occupational programs in which they have reasonable chance for successful completion and probability of successful employment. Students who have successfully completed occupational training programs should be able to obtain, hold and advance in jobs related to their



¹Milton E. Larson. "Attitude, Money and Program," in <u>Contemporary Concepts</u> in <u>Vocational Education</u>, Gordon F. Law, ed., Washington, D.C. American Vocational Association. Inc., 1971, pp. 55-56.

²J. Chester Swanson, "Criteria for Effective Vocational Education," in Contemporary Concepts in Vocational Education, Gordon F. Law, ed., Washington, D.C., American Vocational Association, Inc., 1971, p.24.

preparation.

Findings reported in this chapter are concerned with the status of occupational program completions after one years availability to the labor force; length of time it took to find initial employment; number of jobs held since leaving school; reasons for job changes; relatedness of employment at the time of the survey to training taken; reasons for non-related employment; satisfaction with job held at the time of the survey.

STATUS OF RESPONDENTS AT THE TIME OF THE SURVEY

The percentage of alumni who were in the labor force at the time of the survey ranged from a high of 86 percent in Industrial Oriented Occupations to a low of 58.4 percent in Health Occupations. A high of 28.3 percent of the Health Occupations alumni were not available to the labor force, however. The percentage of alumni who were unemployed and actively seeking employment at the time of the survey ranged from 3.6 percent in Agri-Business Occupations to a high of 11.6 percent of those prepared in Special Programs. (See Table 9).

STATUS OF RESPONDENTS IN CONTINUING EDUCATION

While it can be argued that failure to enter the labor market constitutes failure of occupational instruction, it is considered by many that further education, perhaps induced by the training program is not contrary to the best interest of occupational alumni or to the interests of society in general. The strict interpretation of the stated purpose of occupational education to prepare students to enter the labor market limits the broad scope envisioned for such education. One amplification of the directives of the 1968 Amendments may be found in the following statement considered worthy of "serious consideration" by the House Committee on Education and Labor (House Report No. 1647). "Vocational programs should be developmental, not terminal, providing maximum options for





TABLE 9
STATUS OF RESPONDENTS AT THE TIME OF THE SURVEY BY PROGRAM AREA*

the	JON JATOT 9[ds[isvA	14.1	19.4	28.3	11.7	23.5	16.5	17.1
رة ب	seeking work Unemployed; not	01.4	02.1	9.70	01.3	03.1	08.5	02.2
Available Labor Ford	Full-fime homemaker	0.00	04.3	0.50	00.5	13.3	04.3	03.4
Not	Tull-time student	12.7	13.0	15.7	6.60	07.1	03.7	11.5
Military Labor Force	Voth Military Service	10.9	01.9	02.5	09.5	02.8	01.8	04.9
Unemployed Labor Force	TOTAL Actively dot a gnises	03.6	0.90	10.9	0.90	8.60	11.6	06.4
	bəyofqm3 JATOT	71.4	72.3	58.4	86.0	64.0	70.0	71.6
ŝ	Full-time student; Work part-time	18.2	14.0	13.8	13.5	07.5	05.5	13.4
Employed Labor Force	Work full-time; School part-time	01.4	03.1	03.1	04.1	01.2	02.4	03.2
loyed La	Work part-time; School part-time	01.4	02.5	01.9	02.6	00.4	02.4	02.4
Emp.	Employed part-time	01.8	04.1	02.5	16.0	0.60	0.70	04.0
	Employed full-time	48.6	48.6	37.1	49.8	45.9	51.8	48.6
	Ииmber Responding	220	2762	159	1598	255	164	5158
	Program Area	AGRI BUS	BUS OCC	нгтн осс	IND OCC	P&P SERV	SPEC PROG	STATE

*In percentages

students to go to college, pursue postsecondary vocational and technical training or find employment."

of the 30.5 percent of the survey respondents who were continuing their education at the time of the survey, 62.2 percent were also in the labor market and 81.7 percent were full-time students. Whether the secondary occupational training induced further education or provided employment skills which enabled respondents to help pay their way, was not determined in this study. However, this large percentage who combined work and study must be taken into consideration when assessing labor force participation. (See Table 10).

LENGTH OF INITIAL JOB SEARCH

Sixty percent of the respondents who have been employed at some time since leaving high school found their first job within a month after leaving school. Approximately 12 percent of the alumni had never been employed since leaving high school. (See Table 11). Alumni of Health Occupations (20.8 percent) and Personal and Public Service (13 percent) program areas had the highest percentage of never employed respondent. Programs completions in these areas were female in nature. Only 9.8 percent of the Industrial Oriented alumni (largely male in nature) and 9.2 percent of the Special Program alumni had not been employed since leaving high school.

REASONS FOR NEVER HAVING BEEN EMPLOYED

A majority of those respondents who had never been employed since leaving high school were in school (59.2 percent). Those alumni indicating they had



³John Beaumont, "Philosophical Implications of the Vocational Education Amendments of 1968", in <u>Contemporary Conception in Vocational Education</u>, Gordon F. Law, ed., Washington, D.C., American Vocational Association, Inc., 1971, pp. 12-13.

TABLE 10
STATUS OF RESPONDENTS IN CONTINUING EDUCATION AT THE TIME OF THE SURVEY BY PROGRAM AREA

Status	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
Percent of all respondents who are in continuing education	33.7	32.6	43.5	30.1	16.2	14.0	30.5
School part-time; work part-time	1.4	2.5	1.9	2.6	0.4	2.4	2.4
School part-time; work full-time	1.4	3,1	3.1	4.1	1.2	2.4	3.2
Full-time student; work part-time	18.2	14.0	13.8	13.5	7.5	5.5	13.5
Full-time student	12.7	13.0	15.7	9.9	7.1	3.7	11.5
Percent of respondents in continuing education who are also in the labor force 62.2 60.1 54.5 67.1 56.1 73.9 62							
Percent of those in continuing education who are full-time students	91.9	82.8	85.5	77.7	90.2	65.2	81.7
Number responding	74	902	55	480	41	23	1575

"not been able to get a job" ranged from a high of 22.5 percent (Personal and Public Service) to a low of 2.4 percent (Agri-Business) with an overall average for the state of 12.9 percent. Respondents who did not want a job ranged from a high of 27.5 percent in Personal and Public Service and 21.2 percent in Health Occupations (female areas in enrollment) to a low of 1.5 percent in Industrial Occupations and 0 percent in Agri-Business (generally male areas of enrollment). In assessing program effectiveness based on these findings, women's work patterns should be taken into consideration. Overall, only .6 percent of the never employed respondents indicated they couldn't earn enough money to make it work working. (See Table 12).



TABLE 11

LENGTH OF TIME TO FIND FIRST JOB BY PROGRAM AREA

	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
Less than one month	66.2	57.6	59.7	65.4	42.4	64.7	59.9
One to three months	11.0	15.2	11.0	14.7	19.3	11.1	14.8
Three to six months	03.3	06.7	02.6	05.6	10.5	09.8	06.4
Over six months	07.1	08.0	05.8	04.6	14.7	05.2	07.1
No j ob since leaving high school	12.4	12.5	20.8	09.8	13.0	09.2	11.8
Number responding	2.0	26 13	154	1467	238	153	4835

TABLE 12

REASONS FOR NEVER HAVING BEEN EMPLOYED SINCE LEAVING HIGH SCHOOL BY PROGRAM AREA

Reasons	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
I'm in school	68.3	65.9	57.6	52.9	30.0	42.7	59.2
I have not been able to get a job	02.4	12.3	12.1	13.7	22.5	19.1	12.9
I'm in the military service	22.0	04.8	00.0	27.0	02.5	14.3	12.0
Do not want a job	00.0	10.4	21.2	01.5	27.5	14.3	08.8
Other	02.4	05.1	09 ., 1	02.9	10.0	09.5	04.9
Poor Health	02.4	01.1	00.0	01.0	02.5	00.0	01.1
Couldn't get into the union	02.4	00.0	00.0	01.0	02.5	00.0	00.6
I can't make enough money to make it worth working	00.0	00.5	00.0	00.0	02.5	00.0	00.6
Number responding	41	375_	33	204	40	21	714



REASONS FOR PART-TIME EMPLOYMENT

Approximately 20 percent of the employed respondents were employed parttime (see Table 9). These respondents were asked whether this was all they could get or if this was all they wanted. Part-time work was chosen by 62.4 percent and 37.6 percent indicated this was all they could find. (See Table 13.)

TABLE 13

REASONS FOR PART-TIME EMPLOYMENT BY PROGRAM AREA

Reasons	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE %
That's all I care to work	51.4	67.1	69.6	59.5	43.9	38.1	62.4
That's all I can get	48.6	32.9	30.9	40.5	56.1	61.9	37.6
Number responding	35	474	23	247	41	21	841

NUMBER OF JOBS HELD

In a rapidly changing industrial society, the chances for individuals to make several job changes a sincreasing. National advisory concils on vocational education have long indicated that the job changing profile of program completions has been less than desirable. One of the purposes of the broad concept of career development is to enable students to have the type of pre-employment experience that will help them make immediate and long range career decisions. Early job information, orientation and experience are designed to help eliminate aimless wandering in the labor market in an attempt to find a satisfying job. While the nature of entry-level employment is such that job changes can be expected, it appears that after availability to the labor market for one year 46.3 percent of the occupational alumni have held only one job. An additional 30.6 percent have held only two different jobs. Only 4.2 percent have changed jobs four or more times. (See Table 14.)



TABLE 14

NUMBER OF JOBS HELD SINCE LEAVING HIGH SCHOOL
BY PROGRAM AREA

Number of Jobs	AGR I BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
One job	41.3	46.2	47.8	39.8	42.0	46.3	43.9
Two jobs	26.8	30.3	22.6	32.5	32.3	29.3	30.6
Three jobs	12.2	09.7	09.4	14.5	08.6	12.2	11.3
Four or more jobs	06.6	03.2	01.9	05.6	05.1	04.9	04.2
No job	26.8	10.7	18.2	07.6	12.1	07.3	10.0
Number responding	213	2719	159	1545	257	164	5057

REASONS FOR JOB CHANGES

In Table 15, the reason "took a better job" was most frequently cited for changing jobs (26.8 percent). Another 17.3 percent of the respondents left jobs to enter school. If amount of education does influence job options, with more education bringing concommitant advances up the job ladder, then it might be conjectured that 44.1 percent of the total job changes (first two rows combined) were made in pursuit of better jobs. Another 24.3 percent of the job changes were because respondents were in temporary jobs or were laid off.

Alumni experiencing job change due to temporary jobs ranged from a high of 24.3 percent of the Agri-Business alumni to a low of 7.4 percent of the Special Program alumni. Only 2.6 percent of the Health Occupations alumni were "laid off". Approximately 10 percent of the Special Programs (9.5 percent) and the Personal and Public Service (9.1 percent) alumni changed jobs because of low pay. Table 15 summarizes the reasons for the 4,296 job changes made by the respondents. These changes are broken down into reasons for leaving first job, second job, third job, and fourth job in Appendix Tables C-1, C-2, C-3, and C-4.



TABLE 15

REASONS FOR LEAVING JOBS HELD BY PROGRAM AREA

Reasons	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE %
Took a better job	23.8	26.8	23.1	28.1	20.9	27.7	26.8
Entered school	17.8	19.8	26.5	15.1	07.7	10.1	17.3
Temporary job ended	24.3	14.7	07.7	13.5	12.3	07.4	14.1
Laid off	11.4	07.7	02.6	13.3	12.3	13.5	10.2
Pay too low	03.2	06.6	06.8	08.0	09.1	09.5	07.2
Disliked the work	01.1	04.8	02.6	04.7	06.4	06.1	04.7
Military service	10.3	01.8	01.7	06.9	02.3	06.8	04.1
Moved away	00.5	04.9	03.4	02.6	06.4	05.4	03.9
Got married	00.0	03.3	03.4	00.9	05.9	02.0	02.4
Disliked the hours	02.2	02.0	04.3	02.4	00.9	05.4	02.3
Disliked the people	02.7	02.4	03.4	01.8	01.8	01.4	02.2
Too far to drive	00.5	02.2	02.6	01.4	03.2	00.7	01.8
Family reasons	01.1	01.8	05.1	00.6	06.4	01.4	01.7
Health problems	01.1	01.4	06.8	00.6	04.6	02.7	01.5
Number responding	185_	2107	117	1519_	220	148	4296

THE MEASUREMENT OF JOB RELATEDNESS TO OCCUPATIONAL INSTRUCTIONAL PROGRAMS

One of the purposes of this survey was to test a method of measuring the relatedness of respondent's employment to training taken. The importance of such measurement depends upon ones' perception of the purpose of occupational training. If the primary purpose of job training is to prepare students for entry into the labor force where they may then acquire necessary job skills, employment may be used as a principle measure of program effectiveness. However, under the Vocational Education Act of 1963 and the subsequent 1968 Amendments,



occupational education is perceived to have a responsibility for providing knowledge, skills and competences relevant to a specific occupation or related group of occupations. Thus, it is necessary to be able to specify, for a given instructional program and occupation the degree of relatedness.

The method utilized for measuring the relatedness of employment to training taken is based on the U.S. Office of Education document, <u>Vocational Education and Occupations</u>, which links occupational education programs to occupations. The purpose of matching instructional programs to occupations is to:

- Assist State agency personnel in describing job market in terms of occupational programs;
- 2. Assist occupational educators in planning programs; and
- 3. Provide counseling and guidance personnel with realistic information concerning the relationship between occupational education programs and occupations in which program completers may find employment.

The selection of occupations associated with instructional programs is based largely on the experiences of vocational technical educators. An Ad Hoc committee in each of the seven recognized occupational education areas applied the following rationale for the selection of items in each of the subject-matter areas: 1) the items were determined by consensus of the committee to be appropriate to the subject-matter area; 2) the items could be defined in brief form using only salient descriptive elements; and 3) the various items classified under a subject-matter area were identifiable by titles, which the Ad Hoc committee considered to be most commonly used in the subject-matter area. Each occupational program was assigned an Office of Education Code (0.E. Code) number, e.g., 01.0200-Agricultural Supplies/Services; 04.0800--General Merchandise; 07.0303--Nursing Assistance (Aide); 09.0201--Care and Guidance of Children, etc.



The O.E. Code Number is divided into three segments:

14.0702 -- O.E. Code Number for Secretaries

- 14. -- Subject-Matter Area (in this case disignating Business, Marketing, and Management Occupations)
 - .07 -- Principle Segment (in this case designating Steographic, Secretarial, and Related Occupations)
 - 02 -- Specific Division of Principle Segment (in this case designating Secretaries)

Within the Principle Segment 14.0700--Stenographic, Secretarial, and Related Occupations, three <u>Specific Divisions</u> are recognized by the I.D.V.T.E. They are:

14.0701 -- Executive Secretary,

14.0702 -- Secretaries, and

14.0703 -- Stenographers.

Each Specific Division prepares workers for occupations having substantial similarities, e.g., similarity in the work performed; similarity in the abilities and knowledge required of the worker for successful job persormance; similarity in the tools, machines, instruments and other equipment worked on or with. For example, the <u>Specific Division</u> 14.0702--Secretaries prepares workers for the following occupations:

O.E. Code	Program Name	D.O.T. Code	Occupational Title
14.0702	Secretaries	201.268 201.368 201.368 201.368	Social Secretary Legal Cocretary Medical Secretary Secretary

Each employed surevey respondent was asked to provide: 1) the title of his/her job; 2) the type of business; and 3) a list of job duties. Almost any job title has a description in the <u>Dictionary of Occupational Titles</u>, Volume I, (D.O.T.), this information was used to assign a D.O.T. Code number for the job the respondent held. (An explanation of the D.O.T. Classification System appears in Appendix A.) Since each occupational training program is related to a specific group of occupations by D.O.T. Code number, it was then a simple matter to match the D.O.T.



Code Number of the job with the O.E. Code number of the training program completed to determine the relatedness of the job to the training taken. Categories for describing the relatedness of training to employment are as follows:

"Same" or "Closely Related" occupation. When a respondent was found in either a 201.268--Social Secretary or a 201.368--Secretary, including Legal and Medical, occupation and that respondent was trained in a 14.0702--Secretaries program, the respondent was in the "same" occupation for which trained or in a "closely related" occupation.

"Related" occupation. When a respondent was found in either a 201.268-Social Secretary or a 201.368--Secretary, including Legal and Medical,
occupation and that respondent was trained in a 14.0700--Stenographic,
Secretarial and Related Occupation or a 14.0701--Executive Secretary or
a 14.0703--Stenographers coded program (all programs are within the same
Principle Segment as the 14.0702--Secretaries), the respondent was in a
"related" occupation. All programs within a Principle Segment are related
to each other and to the corresponding related occupations.

"Non-related" occupation. When a respondent was found in either a 201.268-Social Secretaries or a 201.368--Secretaries, including Legal and Medical,
occupation and that respondent was not trained in a program coded 14.0702-Secretaries ("closely related") or in a 14.0700--Stenographic, Secretarial,
and Related Occupations, a 14.0701--Executive Secretaries, or a 14.0703-Stenographers (all "related"), the respondent was in a "non-related"
occupation. Even though the respondent may have been in another 14.XXXX
program there are not the type of substantial similarities necessary to
qualify it as a "related" training program.



A fourth category for describing the relatedness of training to employment was necessary where broad occupational O.E. Code numbers were assigned to programs, e.g., 01.0000--Agricultural Occupations; 18.9900--Cooperative Work Experience, etc. Since these programs do not have matching occupations, it is not possible to use the matching procedure. In cases where the respondents indicated they were not working in occupations for which trained, they were coded as "non-related" and when relatedness was not determinable they were coded "not measurable".

The jobs held by respondents employed at the time of the survey are listed in Appendix A. The extreme right column of Table A-2 contains the instructional programs that are related to the occupation or group of related occupations.

Appendix B contains the instrument used in this study to determine the relatedness of the occupation found in to the training taken.

The relatedness (Table 16--rows one and two combined) of training to job found in at the time of the survey ranged from a high of 62 percent among Health Occupations alumni to a low of 17 percent among Industrial Oriented Occupations alumni. (Special Program alumni excluded.) Overall, 23 percent of the employed respondents were in related occupation, 68 percent were in non-related occupations and 8 percent of the respondents jobs and training were not measurable.

REASONS FOR NON-TRAINING RELATED EMPLOYMENT

In Table 17, the reason most frequently cited for employment in a job not related to training was, "Couldn't find a job for which I was trained". Overall, 31.6 percent checked this category with a range from a high of 37.8 percent (Industrial Occupations) to a low of 12.7 percent (Special Programs). Note that 25.5 percent of the Special Program alumni indicated they couldn't earn enough money while 21.4 percent of the Health Occupations alumni didn't like the jobs for which they were trained. The "other" category was checked by 26.8 percent of the respondents to this item. Reasons written in the blank by this category



TABLE 16

RELATEDNESS OF TRAINING TO EMPLOYMENT AT THE TIME
OF THE SURVEY BY PROGRAM AREA

Relatedness	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
	<u>^^</u>						
Same or closely related occupation	13.0	08.0	40.0	10.0	20.0	01.0	10.0
Related occupation	07.0	19.0	12.0	07.0	09.0	00.0	13.0
Non-related occupation	72.0	68.0	37.0	75.0	66:0	38.0	68.0
Not measurable	08.0	05.0	12.0	09.0	06.0	61.0	08.0
Number responding	145	1945	95	1127	175	114	3601

TABLE 17

REASONS FOR EMPLOYMENT IN A NON-RELATED OCCUPATION

Reasons for non-related jobs	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE %
Couldn't find a job for which I was trained	36.6	28.7	21.4	37.8	21.2	12.7	31.6
Other	21.2	29.6	21.4	24.9	27.1	20.0	26.8
I didn't like the jobs for which I was trained	11.3	16.4	21.4	08.2	11.7	12.7	12.7
Needed more training and couldn't get it	08.5	12.2	14.3	12.5	09.4	14.6	12.1
I couldn't earn enough money	11.3	06.3	10.7	07.3	12.9	25.5	07.9
Didn't know what the job was really like	05.6	03.3	00.0	03.9	02.4	03.6	03.5
Not presently employed	02.8	02.0	07.1	02.8	08.2	05.5	02.9
No chance for promotion	02.8	01.5	03.6	02.7	07.1	05.5	02.5
Number responding	71	797	28	674	85	55	1710



frequently cited: "Didn't know I was being trained for a job"; "What occupational program"; "Didn't look for a job in that area"; "It was better than the other courses the school offered"; Wanted to get out of school early"; etc. Most of the "other" reasons specified were related to a lack of guidance in high school program selection or a lack of understanding the nature of occupational training.

JOB SATISFACTION

Another indication of the success of an occupational training program is the degree of job satisfaction felt by program alumni. The importance of the satisfaction dimension to the labor market has been recognized but vocational followup information available on job satisfaction is fragmentary.

Respondents employed at the time of the survey were asked how they felt about the job they held. Thirty-six percent of the respondents indicated very high job satisfaction, 31.4 percent indicated high job satisfaction and 23.8 percent indicated moderate job satisfaction. Only 7.7 percent (Table 18, rows four and five combined) indicated low or very low job satisfaction. Note that 53.9 percent of the Health Occupations Alumni were very highly satisfied with their jobs. The highest percentage of low job satisfaction was experienced by Industrial Occupations respondents.

FACTORS CONTRIBUTING TO JOB SATISFACTION

Information on factors which act as job satisfiers adds a psychological dimension to program appraisal. The job factors listed in the survey instrument were identified by respondents to the pilot (Home Economics Cooperative) study in 1971. The most frequently mentioned job satisfier (Table 19) was "everything" (26.7 percent). Another 21.1 percent liked the "nature of the work". Job context factors (i.e., security of having a job, good pay, fellow workers, possibilities for advancement, the hours, and employer) were named as job



TABLE 18

EMPLOYED RESPONDENT'S SATISFACTION WITH JOB HELD AT THE TIME OF THE SURVEY BY PROGRAM AREA

Satisfaction	AGRI BUŞ %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE %
I like it very much	33.6	39.7	53.9	29.6	33.5	31.8	36.1
I like it	36.3	31.5	26.4	30.4	34.8	34.6	31.4
It's ok	26.0	21.8	15.4	27.4	22.4	28.0	23.8
Not what I'd hoped	2.7	5.6	3.3	10.1	8.7	5.6	7.0
It's awful	1.4	1.4	1.1	2.6	0.6	0.0	1.7
Number responding	146	1953	91	1136	161	107	3594



satisfiers by 38 percent of the respondents. Job content factors (i.e., nature of the work, meeting people, and pleasant job duties) were named 32 percent of the time. The category "everything" contains both context and content factors.

TABLE 19
FACTORS CONTRIBUTING TO JOB SATISFACTION BY PROGRAM AREA

Job factors	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
Everything	25.2	28.6	35.8	23.2	25.9	24.7	26.7
Nature of the work	38.5	19.9	30.9	21.4	15.0	16.1	21.1
Security of having a job	08.6	10.5	04.9	13.8	10.9	10.8	11.3
Good pay	11.9	08.5	03.7	15.8	08.8	14.0	11.0
Meeting people	01.5	06.5	08.6	03.6	15.0	03.2	05.8
Fellow workers	05.9	06.2	03.7	04.0	08.2	06.5	05.5
Pleasant job duties	03.7	06.5	03.7	03.1	04.1	07.5	05.1
Possibilities for advancement	02.2	04.0	04.9	10.5	02.7	08.6	04.8
The hours	02.2	04.5	01.2	03.5	06.1	03.2	04.1
Nothing	00.0	03.2	01.2	04.4	01.4	02.2	03.3
Employer	01.5	01.6	01.2	00.6	02.0	03.2	01.2
Number responding	135	1805	81_	1046	148	97	3307

FACTORS CONTRIBUTING TO JOB DISSATISFACTION

Job context factors (low pay, the hours, no possibilities for advancement, working conditions, fellow workers, the boss) were identified by 39.4 percent of the respondents as job dissatisfiers. Job content factors (nature of the work, some customers, patients, etc., unpleasant job duties) were identified by 22.2 percent of the respondents as job dissatisfiers. (See Table 20.)

Note that 37.6 percent of the respondents to this item indicated that there



were no disliked job factors while only 1.1 percent disliked everything about the job they held.

TABLE 20
FACTORS CONTRIBUTING TO JOB DISSATISFACTION BY PROGRAM AREA

lob factors	AGRI BUS	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
Job factors	%						
No dislikes	36.7	39.6	44.2	35.4	27.5	35.7	37.6
Low pay	17.3	17.9	20.9	15.7	26.1	15.3	17.6
Nature of the work	05.8	09.8	07.0	08.9	06.5	06.1	09.1
Some customers, patients, etc.	05.8	07.7	01.2	05.0	07.8	11.2	06.7
Unpleasant job duties	16.6	04.9	05.8	07.8	03.9	08.2	06.4
The hours	04.3	05.1	08.1	07.7	09.2	07.1	06.2
No possibilities for advancement	04.3	05.9	04.7	06.8	07.8	03.1	06.1
Working conditions	06.5	03.0	07.0	07.5	03.3	10.2	04.9
Fellow workers	01.4	03.1	00.0	02.2	05.2	01.0	02.7
The boss	01.4	02.0	01.2	01.6	02.0	02.0	01.9
Dislike everything	00.0	01.0	00.0	01.6	00.7	00.0	01.1
Number responding	139	1871	86	1067	153	98	3414

AREAS OF DIFFICULT ADJUSTMENT IN INITIAL EMPLOYMENT

Fifty percent of the difficult adjustments in initial employment were related to performance factors characteristic to a given job in a given place of employment. (See Table 21.) Twenty-six percent of the respondents experienced no difficult adjustment in initial employment. Twenty-one percent of the respondents felt the most difficult adjustments were related to personal factors such as making decisions, efficient user of time and getting along with other people.



TABLE 21

AREAS OF MOST DIFFICULT ADJUSTMENT IN INITIAL EMPLOYMENT BY PROGRAM AREAS

Area of adjustment	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
Performance Factors							
Learning the layout, routine, machines, etc.	32.0	31.0	24.0	27.0	28.0	22.0	29.0
Speed	12.0	12.0	08.0	14.0	16.0	13.0	13.0
Certain job tasks	08.0	08.0	06.0	08.0	05.0	09.0	08.0
Subtotal	52.0	51.0	38.0	49.0	49.0	44.0	50.0
Personal Factors							
Making decisions	08.0	07.0	12.0	05.0	05.0	08.0	07.0
Managing time efficiently	06.0	07.0	10.0	07.0	08.0	07.0	07.0
Patience, courtesy, initiative, etc.	04.0	03.0	03.0	04.0	04.0	05.0	03.0
Getting along with the public	02.0	02.0	02.0	02.0	04.0	07.0	02.0
Working with fellow workers	01.0	01.0	02.0	02.0	01.0	02.0	02.0
Subtota1	21.0	20.0	29.0	20.0	22.0	29,0	21.0
Nothing	25.0	25.0	33.0	28.0	23.0	20.0	26.0
Everything	02.0	01.0	01.0	01.0	03.0	02.0	01.0
<u>Other</u>	01.0	03.0	02.0	03.0	02.0	03.0	03.0
Number responding	171	2160	123	1204	208	127	3996

^{*}Will not total 100 percent due to rounding



OCCUPATIONAL CATEGORIES OF JOBS HFLD BY RESPONDENTS

In the <u>Dictionary of Occupational Titles</u>, 21,741 separate occupations have been defined, classified, and identified by 6-digit numbers. The three digits to the left of the decimal identify the Occupational Group Arrangement. The first digit identifies a broad occupational <u>category</u> according to work field, purpose, material, product, subject matter, service, generic term, and/or industry. There are nine occupational categories. Appendix A contains an explanation of the D.O.T. Classification System.

Table 22 shows that the largest number of employed respondents were found in the clerical and sales occupational category (46.4 percent). Fourteen percent were found in service occupations. Processing, machine trades, bench work and structural work occupations accounted for 24.1 percent of the jobs employed respondents found. Specific occupations are listed in Appendix Table A-2.

JOB DIVISIONS IN WHICH MORE THAN FIFTY RESPONDENTS WERE EMPLOYED

The nine broad occupational categories in the Occupational Group Arrangement are divided into 84 broad subject matter <u>divisions</u>, reflected in the first and second digits of the D.O.T. Code. The eighteen job divisions reported in Table 23 were divisions in which the largest groups of respondents found employment. Appendix Table A-2 lists all the jobs employed respondents were found in at the time of the survey.

SPECIFIC JOBS IN WHICH MORE THAN FIFTY RESPONDENTS FOUND EMPLOYMENT

The third digit in the Occupational Group Arrangement identifies the occupational groups, which range from two to twenty-six within each subject matter division. Each of the jobs in an occupational group contain many identical or very similar tasks. The greatest number of employed respondents



held jobs at the time of the survey in the occupational group for clerk-typist (305) or in the secretarial group (272). (See Table 24.) One hundred fifty-three respondents were working as nurse aides, medical attendants, orderlies or psychiatric aides. Note that only 1.7 percent of the salespersons (flying squad) were trained in a related program while 67.2 percent of the receptionists were making some use of their training. Appendix Table A-2 lists all the specific jobs in which employed respondents were found at the time of the survey.

JOBS HELD BY RESPONDENTS AT THE TIME OF THE SURVEY BY OCCUPATIONAL CATEGORY

Occupational category	Number Employed	Percent of Total Employed
Clerical and Sales Occupations	1672	46.4
Service Occupations	505	14.0
Machine Trades Occupations	314	08.7
Structural Work Occupations	283	07.9
Miscellaneous Occupations	247	06.9
Professional, Technical, and Managerial Occupations	204	05.7
Bench Work Occupations	172	04.8
Farming, Fishery, Forestry, and Related Occupations	102	02.8
Processing Occupations	96	02.7



TABLE 23

D.O.T. JOB DIVISIONS IN WHICH MORE THAN FIFTY RESPONDENTS WERE EMPLOYED AT THE TIME OF THE SURVEY

D.O.T. Job Division	Job Division Title	Number Employed
200209.	Stenography, Typing, Filing & Related Occupations	735
210219.	Computing & Account Recording Occupations	339
250299.	Salès Occupations	268
310319.	Food & Beverage Preparations & Service Occupations	207
350359.	Miscellaneous Personal Service	166
230239.	Information & Message Distribution Occupations	146
620629.	Mechanics & Machinery Repairmen	141
220229.	Material & Production Recording Occupations	126
860869.	Construction Occupations	112
920929.	Packaging & Materials Handling Occupations	97
610619.	Metalwork Occupations	68
910919.	Transportation Occupations	63
070079.	Medical & Dental Assistants & Technicians	60
420429.	Miscellaneous Farming & Related Occupations	59
240249.	Miscellaneous Clerical Occupations	58
330339.	Barbering, Cosmetology, & Related Occupations	57
600609.	Metal Machining Occupations	53
180189.	Managers and Officials, N.E.C.	53



TABLE 24

OCCUPATIONAL GROUPS IN WHICH MORE THAN FIFTY RESPONDENTS
WERE EMPLOYED AT THE TIME OF THE SURVEY

D.O.T. Code	Job Title	Number Employed	Percent Who Were Trained in Related Programs
Clerical	and Sales Occupations		
209.388	Clerk-Typist; Mortgage Clerk; Statement Clerk; Tax Clerk	305	33.6
201.368	Secretaries, including Legal and Medical	272	62.9
210.388	Bookkeeper	61	14.8
237.368	Receptionist	61	67.2
289.458	SalespersonFlying Squad	60	1.7
219.388	General Office Clerk; Billing Clerk; Medical Ward Clerk	55	47.3
203.588	Typist; Telegraphic Typewriter Operator	51	58.8
Service	Occupations		
355.878	Nurse Aide; Medical Attendant; Orderly; Psychiatric Aide	153	46.2
311.878	Waiter; Waitress; Counterman; Busboy	93	11.6
313.381	Cook; Food Service Worker	60	20.0
332.271	Cosmetologist	53	34.0
Machine	Trades Occupations		
620.381	Automobile Service Mechanic	79	41.8
616.380	Machine Operator; Set-up Man	53	17.0



CHAPTER V

ALUMNI AND EMPLOYER/SUPERVISOR ASSESSMENTS OF OCCUPATIONAL PROGRAM EFFECTIVENESS

One of the basic assumptions upon which this study was predicated was that the former student and his/her employer know the strengths and weaknesses of programs of occupational preparation. Information was gathered from former students and their employers at the time of the survey to determine their satisfaction with secondary level occupational instruction. Reported in this chapter are: alumni assessments of the effectiveness of the occupational training they received in high school, alumni recommendations for program improvement, employer/supervisor assessments of alumni preparation for employment, alumni suitability for the job held, and entry level skills considered important by employer/supervisors.

ALUMNI RATINGS OF TRAINING EFFECTIVENESS

Respondents to the alumni survey were asked to rate the helpfulness of their high school occupational training in preparing them for eleven aspects of employment. Rating was done on a four point scale: 1 = None, 2 = Little, 3 = Some, and 4 = Much. Ratings were averaged by program areas and by total responses. Average ratings below 2.5 on the four point scale were considered indicators of program ineffectiveness while ratings of 3.0 and above were



Rupert N. Evans, Garth L. Mangum, and Otto Pragan, <u>Preparation for Employment: The Background and Potential of the 1968 Vocational Education Amendments</u> (Ann Arbor, Michigan: Institute of Labor and Industrial Relations, The University of Michigan--Wayne State University; Washington, D.C.: National Manpower Policy Task Force, May 1969), p. 55.

considered desirable. It appears that while only three aspects of employment received less than a 2.5 average rating, overall, the alumni assessments of the helpfulness of their training is low (see Table 25). Alumni of Health Occupations programs consistently rated their training higher than overall averages. Six aspects of program preparation were rated above 3.0 with preparation for getting along with the patient being rated at 3.48 and knowing what to do on the job being rated at 3.36. Personal and Public Service respondents rated their occupational training most effective in getting along with the customer, patient, etc., (3.07) and in getting along with other workers (3.03). Special Program respondents found most help in getting along with other workers (3.14), applying for a job (3.06) and interviewing for a job (3.02).

Overall ratings show that programs of occupational preparation in Illinois are most effective in teaching students how to use job tools and equipment (2.94) and in efficient use of time and energy (2.81). Helpfulness in getting along with the public served was ranked eight in order of program effectiveness while being able to talk to the boss about job related problems and understanding union membership were ranked tenth and eleventh respectively.

WHETHER OR NOT ALUMNI WOULD RECOMMEND TRAINING TAKEN TO OTHERS

Alumni respondents were asked if they would recommend the training program they completed to other students. In view of the low average ratings of program helpfulness in preparing them for employment, it was anticipated that the percentage who would recommend the training to others would be lower than it was. Ninety-three percent of the respondents would recommend their training program to others (see Table 26). Recommenders ranged from a high of 97 percent of the Health Occupations alumni to a low of 89 percent of the Personal and Public Service alumni. When 46 percent of the respondents



TABLE 25

ALUMNI RATINGS OF TRAINING CONTRIBUTION TO EMPLOYMENT BY PROGRAM AREAS

Aspect of Employment	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
Knowing how to use tools and						_	
equipment on the job	2.84	2.97	3.18	2.97	2.70	2.42	2.94
Using time and energy	2.69	2.82	3.10	2.76	2.97	2.79	2.81
Getting along with other workers	2.87	2.74	3.17	2.81	3.03	3.14	2.81
Applying for a job	2.38	2.95	2.89	2.28	2.79	3.06	2.73
Interviewing for a job	2.35	2.95	2.80	2.22	2.76	3.02	2.70
Knowing what to do in this							
kind of job	2.50	2.65	3.36	2.71	2.78	2.51	2.68
Finding needed information	2.63	2.66	2.96	2.63	2.72	2.61	2.66
Getting along with the customer, patient, etc.	2.43	2.64	3.48	2.32	3.07	2.97	2.61
Handling new or unpleasant situations	2.48	2.43	3.14	2.38	2.62	2.57	2.46
Being able to talk to the boss about job problems	2.43	2.32	2.57	2.39	2.59	2.80	2.38
Understanding union membership	1.55	1.52	1.86	1.58	1.87	1.95	1.58
Number responding	179	2263	131	1279	219	145	4216

indicated no one influenced their decision to enroll in the program they took and many respondents indicated they weren't aware that they had enrolled in a job preparation program, one must question why such a large percentage of alumni would recommend the program to other students. It may be that the respondents did not have attractive alternatives open to them and their enrollment may have represented selection of the least unattractive curriculum. Or, respondents may have felt that while the instructional program was not as



helpful as it could have been, it was more useful than watered down general algebra or the atomic weight of carbon.

TABLE 26
WHETHER OR NOT RESPONDENTS WOULD RECOMMEND OCCUPATIONAL
TRAINING TO OTHERS BY PROGRAM AREA

Recommendation	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
Would recommend the program	92.0	93.0	97.0	94.0	89.0	93.0	93.0
Would not recommend the program	08.0	07.0	03.0	06.0	11.0	07.0	07.0
Number responding	190	2513	158	1371	249	152	4633

ALUMNI RECOMMENDATIONS FOR PROGRAM IMPROVEMENT

Alumni were asked to indicate what would improve the occupational training they had received in high school. The most frequently made recommendation was that more individual help be given students in learning about what kinds of jobs they might get, what courses to take in high school, what kind of posthigh school training they might need (36.8 percent checked this item). (See Table 27.) Another 25.8 percent felt placement service—more help with knowing where and how to get a job after high school, was needed in the school. It would appear that many former students felt their career choices were left to chance. This is particularily discouraging, since it suggests that irreversible educational decisions by high school students are being made on the basis of relative ignorance. Other recommendations made by at least 20 percent of the respondents to this item included: training needs to be more like the real job (23.8 percent), training should be "cluster" oriented (22.3 percent), and more emphasis should be placed on related job skills (20.6 percent). Note that while 9.6 percent of the respondents felt teachers should know more about the



jobs they're teaching 19.0 percent of the Agri-Business respondents checked this improvement. Only 2.3 percent of the overall respondents to this item felt that occupational training should be narrow in scope and prepare students for one specific job.

ALUMNI SUITABILITY FOR EMPLOYMENT

Employer/supervisors of respondents employed at the time of the survey were asked to rate the suitability of the occupational program completions for the jobs they held. One indication of the success of programs of occupational preparation is the degree of suitability of former students for employment. While the percentage of alumni who found training related employment is small, there are in addition to technical skills related skills and knowledge that are needed by all workers. Programs of occupational preparation are responsible for developing attitudes, basic knowledge, and habits appropriate for the world of work as well as technical skills.

Employer/supervisors found 73.5 percent of the employed respondents to be highly suited for the job they held at the time of the survey (Table 28, rows one and two combined). Only 3.9 percent were rated as not suited for the job they held (rows four and five combined).

A determination of the degree of correlation between employed respondents' satisfaction with the job held and employer/supervisors' assessment of their suitability for the job was made. The hypotheses was made that respondents who were satisfied with their job would also be rated as suitable for that job. There was a high positive correlation between alumni response to the item measuring job satisfaction and employer/supervisors' ratings of suitability (.9998--correlation matrix).



TABLE 27

RESPONDENTS' RECOMMENDATIONS FOR IMPROVING OCCUPATIONAL TRAINING RECEIVED IN HIGH SCHOOL BY PROGRAM AREAS (Multiple responses)

Recommendations	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV, %	SPEC PROG %	STATE %
More individual help should be given students in learning what kind of jobs they might get, what courses to take in high school, what kind of schooling they might need after high school.	33.0	37.4	33.8	36.7	34.5	38.8	36.8
More help with knowing where and how to get a job after high school.	13.0	25.5	15.0	25.7	27.9	23.8	25.8
Training needs to be more like the real job.	20.5	26.4	11.9	21.9	21.7	18.1	23.8
Training should prepare you for several jobs	23.0	24.1	13.8	19.2	22.9	27.5	22.3
Training should include things like how to: get along with co-workers, the boss, the customer; get into the union; take license exams; file income tax; apply for workman's compensation; dress for the job.	21.5	23.5	21.3	16.0	15.9	18.8	20.6
Greater variety of classroom activities (field trips, etc.)	22.0	16.5	17.5	14.9	15.3	21.9	16.4
Offer a greater selection of training programs.	21.5	19.0	13.1	13.3	19.0	19.4	17.2
No improvements needed	07.5	10.8	27.5	09.7		08.1	10.7
Teachers should know more about the jobs they're teaching.	19.0	08.8	10.6	09.3	12.8	07.5	09.6
Other	03.0	04.3	04.4	05.5	04.3	05.6	04.7
Training should prepare you for one specific job rather than for several jobs.	04.0	01.7	02.5	02.8	01.6	05.3	02.3
Number responding	200	2638	160	1467	258	160	4883



TABLE 28
SUITABILITY FOR EMPLOYMENT ACCORDING TO EMPLOYER/SUPERVISORS BY PROGRAM AREA

Suitability	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG	STATE %
Exceptionally able	33.3	33.8	28.8	29.4	33.7	20.7	31.9
Well	41.0	41.0	42.4	42.3	40.8	45.1	41.6
Acceptable	20.5	22.4	27.1	22.6	21.4	28.0	22.7
Poorly	03.8	02.7	01.7	05.0	03.1	04.9	03.5
Not at all	01.3	00.1	00.0	00.7	01.0	01.2	00.4
Number Responding	78	1441	59	738	98	82	2496

EMPLOYER/SUPERVISOR ASSESSMENTS OF PROGRAM EFFECTIVENESS

Employer/supervisors of respondents employed at the time of the survey were asked how well prepared the former occupational students were for the jobs for which hired. Fifteen aspects of employment were rated on a four point scale: 1 = Not at all; 2 = Poorly; 3 = Somewhat; and 4 = Well. Ratings reported in Table 29 were averaged by program areas and by the total for all program areas. Overall employer/supervisor ratings were above 3.3 in all listed aspects of employment. Alumni ability to work with others was rated highest (3.83 on a four point scale) with job knowledge being rated lowest at 3.38. Only two ratings within program areas fell below the desirable level (3.0) but were still within the acceptable range (2.5). Employed Personal and Public Service respondents were rated 2.93 and employed Industrial Occupations alumni were rated 2.73 in accepting advice and supervision. Employer/supervisors seem to be pleased with the preparation of former occupational students in the selected aspects of employment rated.



Seven aspects of employment were analyzed to determine the amount of correlation existing between employer/supervisor appraisals of readiness for employment and alumni appraisals of the contribution their occupational program made to their employment. There was a high positive correlation between the two raters concerning knowing how to use job tools and equipment (.9808). Employer/supervisors and alumni did not perceive the ability to talk to the boss in the same way (correlation matrix of .0245). (See Appendix Table C-5). Employer/supervisors rated alumni ability to talk to the boss about job problems at 3.54 while alumni rated the same ability at 2.38.

Overall employer/supervisor ratings by regions were also computed and are reported in Appendix Table C-6. The percentage of employer/supervisors who indicated specific employment aspects did not apply for the job held are reported in the same table. In 99.1 percent of the jobs held, the ability to accept advice and supervision was rated as applicable. Regular attendance was applicable to 99.0 percent of the jobs; cooperativeness and ability to get along with others was applicable in 98.6 percent of the jobs; dependability in 98.9 percent; work quantity in 98.0 percent; work quality in 97.9 percent; initiative in 97.8 percent; ability to talk to the boss in 96.9 percent; and adaptability to new situations in 96.2 percent of the jobs.

IMPORTANT ENTRY SKILLS IDENTIFIED BY EMPLOYERS

Employer/supervisors were asked to check three entry personal qualities and/or job skills they considered most important for employment in the jobs held by the employed former occupational students. The ability to get along with others--other workers, customers, patients, etc., was named by 53.6 percent of the employer/supervisors responding to this item (see Table 30). Accuracy was indicated as important by 51.2 percent of the employer/supervisors.



TABLE 29

EMPLOYER/SUPERVISOR RATINGS* OF EMPLOYEE PREPARATION
FOR EMPLOYMENT BY PROGRAM AREA

AGRI BUS	BUS OCC	HLTH OCC	IND OCC	P&P SERV	SPEC PROG	STATE
3.90	3.84	3.81	3.81	3.83	3.73	3.83
3.81	3.82	3.83	3.76	3.80	3.71	3.80
3.73	3.77	3.78	2.73	2.93	3.71	3.76
3.74	3.04	3.75	3.86	3.77	3.60	3.68
3.61	3.74	3.64	3.63	3.78	3.49	3.68
3.62	3.70	3.71	3.58	3.70	3.50	3.66
3.78	3.68	3.61	3.60	3.65	3.52	3.65
3.70	3.68	3.70	3.59	3.67	3.44	3.65
3.74	3.63	3.63	3.52	3.65	3.48	3.60
3.77	3.60	3.55	3.07	3.56	3.51	3.57
3.60	3.57	3.37	3.56	3.45	3.49	3.56
3.60	3.54	3.47	3.53	3.54	3.58	3.54
3.60	3.60	3.49	3.43	3.64	3.29	3.54
3.51	3.50	3.57	3.40	3.51	3.24	3.47
3.51	3.39	3.44	3.33	3.31	3.29	3.38
	3.90 3.81 3.73 3.74 3.61 3.62 3.78 3.70 3.74 3.60 3.60 3.60 3.51	BUS OCC 3.90 3.84 3.81 3.82 3.73 3.77 3.74 3.04 3.61 3.74 3.62 3.70 3.78 3.68 3.70 3.68 3.71 3.63 3.72 3.60 3.60 3.57 3.60 3.54 3.51 3.50	BUS OCC OCC 3.90 3.84 3.81 3.81 3.82 3.83 3.73 3.77 3.78 3.74 3.04 3.75 3.61 3.74 3.64 3.78 3.68 3.61 3.70 3.68 3.70 3.74 3.63 3.70 3.77 3.60 3.55 3.60 3.57 3.37 3.60 3.54 3.47 3.51 3.50 3.57	BUS OCC OCC OCC 3.90 3.84 3.81 3.81 3.81 3.82 3.83 3.76 3.73 3.77 3.78 2.73 3.74 3.04 3.75 3.86 3.61 3.74 3.64 3.63 3.70 3.68 3.61 3.60 3.74 3.63 3.52 3.77 3.60 3.55 3.07 3.60 3.57 3.37 3.56 3.60 3.54 3.47 3.53 3.60 3.60 3.49 3.43 3.51 3.50 3.57 3.40	BUS OCC OCC OCC SERV 3.90 3.84 3.81 3.81 3.83 3.81 3.82 3.83 3.76 3.80 3.73 3.77 3.78 2.73 2.93 3.74 3.04 3.75 3.86 3.77 3.61 3.74 3.64 3.63 3.78 3.78 3.68 3.61 3.60 3.65 3.70 3.68 3.70 3.59 3.67 3.74 3.63 3.63 3.52 3.65 3.77 3.60 3.55 3.07 3.56 3.77 3.60 3.55 3.07 3.56 3.60 3.57 3.37 3.56 3.45 3.60 3.54 3.47 3.53 3.54 3.51 3.50 3.57 3.40 3.51	BUS OCC OCC OCC SERV PROG 3.90 3.84 3.81 3.81 3.83 3.73 3.81 3.82 3.83 3.76 3.80 3.71 3.73 3.77 3.78 2.73 2.93 3.71 3.74 3.04 3.75 3.86 3.77 3.60 3.61 3.74 3.64 3.63 3.78 3.49 3.78 3.68 3.61 3.60 3.65 3.52 3.70 3.68 3.70 3.59 3.67 3.44 3.74 3.63 3.63 3.52 3.65 3.48 3.77 3.60 3.55 3.07 3.56 3.51 3.60 3.57 3.37 3.56 3.45 3.49 3.60 3.54 3.47 3.53 3.54 3.58 3.60 3.60 3.49 3.43 3.64 3.29 3.51 3.50 3.57 <t< td=""></t<>

^{*}Ratings indicate the average on a four point scale: 1 = Not at all prepared; 2 = Poorly prepared; 3 = Somewhat prepared; and 4 = Well prepared.



Competency in using job tools, machines and materials was only identified as important in 21.6 percent of the positions. These findings are consistent with the findings of other studies indicating that personal qualities dominate the entry level scene. In many jobs, skills can be learned quickly on the job. In other jobs, no particular skills are necessary except the ability to follow directions. There are some entry level jobs, however, in which specific skills are important and employer/supervisors prefer these skills be obtained before employment.

Important entry level personal qualities and job skills were also broken down to see if differences exist between geographic regions in the state.

These findings are reported in Appendix Table C-7.

MULTIPLE REGRESSION ANALYSIS

Alumni responses to two of the survey questions were analyzed using multiple linear regression techniques. This analysis was done to determine if:

- respondents who were in training related jobs at the time of the survey rated the helpfulness of their training program differently than respondents who were not in training related employment;
- 2. there was a significant difference between the ratings of alumni from different program areas on the helpfulness of the training program.
- 3. the recommendations for program improvement made by respondents who were in training related jobs differed significantly from the recommendations for program improvement made by respondents who were not in training related employment; and
- 4. there was a significant difference between the recommendations made by alumni from different program areas.

Each alumni's response to everyone of the eleven possible choices on the two items was regressed to determine the effect of job relatedness and program



TABLE 30

IMPORTANT ENTRY LEVEL SKILLS IDENTIFIED BY EMPLOYER/SUPERVISORS BY PROGRAM AREA*

Entry level skill	AGRI BUS %	BUS OCC %	HLTH OCC , %	IND OCC %	P&P SERV %	SPEC PROG %	STATE %
Ability to get along with othersother workers, customers, patients, etc.	48.1	56.3	_	46.7	56.7	54.2	53.6
Accuracy, quality and thoroughness							51.2
Positive attitude toward work		39.2				50.6	41.3
Dependability	51.6	34.8	32.3	38.0	46.2	41.0	36.7
Judgmentability to make decisions, ability to plan and organize	27.2	26.2	33.8	25.2	21.2	24.1	25.5
Attendance and punctuality	25.9	22.7	20.0	28.7	26.0	26.5	25.0
Competency in using job tools, machines, and materials	39.5	17.9	10.8	28.8	12.5	20.5	21.6
Initiative	14.8	17.4	09.2	23.2	20.2	22.9	19.0
Appearance and grooming	11.1	14.9	09.2	09.0	20.2	09.6	12.9
Work quantity	16.0	10.1	06.2	13.8	13.5	09.6	11.4
Other	00.0	01.1	00.0	01.6	01.0	00.0	01.1

^{*}The percentages will not total 100 percent due to multiple responses to this item. Each employer/supervisor was asked to check 3 personal qualities or job skills that were most important for a person entering the job held by the employee being rated. The table should read--of the employer/supervisors responding to this item, 53.6 percent checked ability to get along with others . . . as an important entry level skill.



area upon the response. In all, a total of 22 regressions were run with the general form: Response = f(Program Area, Job Relatedness). The sample consisted of only those respondents who reported having a job at the time of the survey. The sample size was 3603.

Overall, the predictive value of these equations was low. The coefficient of determination was below 10 percent in all cases. However, we were interested in determining the effect of related employment and program area on the responses of employed survey participants.

In the assessment of the helpfulness of occupational fraining in preparing respondents for employment, six of the regressions were statistically significant (see Appendix Table C-8). Job relatedness was more important than program area in three of the responses: knowing how to use tools and equipment on the job, knowing what one does on this kind of job, and being able to talk to the boss about job problems. In the case of knowing how to talk to the boss, the relationship is negative meaning the less related the job to the training taken the more helpful the program area was in teaching the student how to talk to the boss. In seven of the eleven aspects of employment, the program area is more important in explaining participants' responses (see partial correlation coefficients in Accendix Table C-8) but in only five aspects are the regression coefficients statistically significant.

On the item soliciting recommendations for program improvement, training related employment was more important than program area in only one choice-training needs to be more like the real job. This can be seen from the relative values of the two partial correlation coefficients in Appendix Table C-9. This was the only regression on this item in which the regression coefficient was statistically significant. The program area was significant in explaining responses in five of the eleven recommendations for improvement.



CHAPTER VI

CONCLUSIONS AND IMPLICATIONS

This study focused on six principle dimensions in evaluating the effectiveness of programs of occupational preparation in Illinois: the basis on which occupational decisions were made; the post-high school status of occupational program completers; employment experience of program completers; alumni assessments of program helpfulness and recommendations for program improvement; employer/supervisor appraisals of employee preparation for employment; and entry level personal qualities and job skills considered important for employment.

In order to avoid broad generalization about occupational training based on the total for all programs, findings were also reported in this document by program areas. Since the literature review showed that emphasis has been placed on the importance of occupational students finding employment related to training, an attempt was made to determine the effect of this variable on program effectiveness and recommendations for program improvement.

BASIS UPON WHICH OCCUPATIONAL DECISIONS WERE MADE

Survey findings show that educational decisions made by high school students in selecting occupational preparation programs tend to be left to chance. It is discouraging that only 20 percent of the respondents named school personnel as influencers in their decision to enroll in occupational training. While there is much verbal support for exploration of the world of work, occupational orientation, and pre-employment experience, evidence shows that these concepts have not yet had much influence upon secondary level students.



Many respondents were unaware of the nature of the occupational courses in which they had enrolled. They did not know the courses were employment preparation courses and many did not look for a job in the area of their preparation after leaving high school. Provisions must be made for establishing an organized system of providing occupational information and orientation so youth will have a sound basis upon which to make meaningful decisions concerning their occupational future.

POST HIGH SCHOOL EXPERIENCE OF RESPONDENTS

One indication of occupational program effectiveness in the effect of the program upon unemployment rates. It is encouraging that only 6.4 percent of the survey respondents were unemployed but actively seeking work at the time of the survey. Of concern, is the 11.6 percent of the Cooperative Work Experience alumni who were in this category. Former students who participated in programs of cooperative education have had actual work experience which should have given them an advantage in obtaining future employment.

Three of every ten survey respondents was found to be continuing their education at the time of the survey. More alumni of Health Occupations programs were "in school" than were alumni of other program areas. Occupational training tended to be more of a terminal experience than a stepping stone to further education for alumni of Personal and Public Service and Cooperative Work Experience programs. A majority of those who were continuing their education were full-time students and were also in the labor force.

Occupational students need more than limited specific skills training if they plan on going on to postsecondary education, whether at the community college or four-year college level. Youth need realistic exposure to the world of work so that they know what kinds of jobs they might obtain at each spin-off point, what types of skills are required and what kind of further schooling



they might need. In a rapidly changing world of work, occupational education is never terminal and far more flexible options for high school graduates to continue on to postsecondary education or to enter the world of work must be provided.

EMPLOYMENT EXPERIENCE OF RESPONDENTS

A sizeable percentage of the respondents found a job within one month after leaving high school. Alumni of Personal and Public Service programs did not find employment as rapidly as respondents from other programs areas. It took three out of every ten respondents anywhere from one to more than six months to find initial employment after leaving high school. Active high school placement services could have benefited many of these respondents. Forty-five percent of the Personal and Public Service respondents were in this category.

Roughly sixty percent of the respondents who had never been employed since leaving high school were in continuing education except for Special Programs and Personal and Public Service alumni. A higher than average percentage of alumni in these two program areas were either unable to obtain employment or did not want a job.

At the time of the survey, Health Occupations programs had the highest percentage of respondents in training related employment. Only 17 percent of the Industrial Occupations and 20 percent of the Agri-Business alumni were found in training related employment at the time of the survey. These two program areas also had higher than average proportions of respondents who indicated they couldn't find training related employment.

While the overall percentage of respondents who were found in training related employment at the time of the survey was low, employed respondents were generally well satisfied with their jobs. Satisfied employees tend to be



thought of by their employers as well suited for their jobs. This type of employee-employer satisfaction tends to enhance the job changing profile of workers. The highest proportion of highly satisfied respondents was from the Health Occupations program area. Industrial Occupations alumni were not as highly satisfied with their jobs as alumni from other program areas. Approximately 13 percent of the Industrial Occupations alumni were dissatisfied with their employment situation.

Survey findings support earlier findings by the National Advisory Council on Vocational Education that substantial training related employment rate differentials exist between various occupational program areas. The training related employment rates found in this study are much lower than those reported by Illinois LEA's on the VE-22 Series. Apparently, the LEA's used a more liberal definition of training related employment than is supported by the U.S. Office of Education .

The emphasis given training related employment as an evaluative criteria should be carefully reconsidered. There is much verbal support for the establishment of broad occupational preparation at the secondary level rather than narrow preparation for entry into a specific occupation. Programs whose objectives are to provide students with a set of skills (both general as well as specific) useful in a wide variety of options so that they may select from many attractive career alternatives tend to have reduced training related placement rates. Reliance upon related placement as a major evaluative criteria many cut down future fiscal resources for those programs that develop multiple job skills and basic knowledge.

Other criteria which may be more useful than related employment for determining curricular modifications might include job satisfaction, alumni assessments of program effectiveness and recommendations for program



improvement, and employer appraisals of employment preparation and identification of important entry level skills.

ALUMNI ASSESSMENTS OF EMPLOYMENT PREPARATION

Occupational program alumni generally felt that occupational education could be improved. Training programs were most helpful in preparing former students for use of job tools and equipment. Areas where job preparation was least effective were: getting along with the public served; handling new or unpleasant situations; being able to talk to the boss about job problems; and understanding union membership.

While the majority of respondents would recommend that other students select occupational training programs of interest to them, they felt more emphasis should be placed upon occupational information, orientation and exploration of the world of work. It is apparent that programs of occupational preparation have not been effective in developing in students adequate and realistic knowledge about available jobs and career decision making and planning skills. Respondents also expressed a need for high school personnel to provide placement services with a higher than average percentage of Personal and Public Service alumni expressing this need.

Respondents generally felt training could be more realistic--more like the real job. A larger proportion of Business, Marketing and Management alumni made this recommendation than alumni of other program areas.

Findings tend to support the view that cluster oriented employment preparation is to be preferred to specific job training. Low proportions of program completers were found in training related jobs yet high proportions were well satisfied with their jobs. Roughly one-fourth of the respondents felt training should prepare you for several jobs rather than for one specific job. Many respondents also felt that more emphasis should be placed upon



common job skills and related basic knowledge needed by all workers.

EMPLOYER/SUPERVISOR APPRAISALS OF EMPLOYMENT PREPARATION

Employer/supervisor assessments of alumni readiness for employment indicate satisfaction with occupational training program contributions to alumni employability. Thirteen of fifteen aspects of employment were rated from 3.5 to 3.8 on a 4.0 scale. Employed Industrial Occupations and Personal and Public Serivce alumni were rated low in being able to accept advice and supervision, while other program alumni were rated high in this employment aspect.

It was of interest to note that while emphasis is placed upon skill training at the secondary level, employer/supervisors found training programs to be least effective in this area. The large proportion of respondents who were found in non-training related employment could explain the lower rating in this employment aspect. However, since employees were considered "somewhat prepared" even for non-training related employment, Illinois occupational programs must provide basic enough preparation for the type of entry level positions program alumni obtain. Competency in using job tools, machines and materials was only identified as an important entry level skill in 21.6 percent of the positions held by employed respondents.

IMPORTANT ENTRY LEVEL PERSONAL QUALITIES AND JOB SKILLS

Personal qualities dominated entry level competences identified by employer/supervisors of respondents employed at the time of the survey. Workers who can get along with other workers, customers, patients, etc., and who are thorough, accurate and produce quality work are desired. Over one-half of the employer/supervisors identified these competences as the most important entry level qualities needed for entry into the positions held by employed alumni survey respondents. The third most frequently mentioned quality



needed for entry level employment was a positive attitude toward work. The extent to which these nonskill factors are included in occupational instruction should affect the employment success of occupational program alumni. Programs designed in full cognizance of entry requirements, given that other program aspects are comparable, should prove to be effective in preparing secondary students for entry into the world of work.

THE IMPORTANCE OF RELATEDNESS AND PR M AREA

With the exception of Health Occu, and alumni, there were very low proportions of survey respondents who were found in jobs related to their training at the time of the survey. Regression analysis showed that training related employment was important in explaining respondent assessments of program effectiveness in only three areas: knowing how to use tools and equipment on the job; knowing what one does on the job; and knowing how to talk to the boss about job problems. In the latter case (being able to talk to the boss), a negative relationship was revealed between this item and the relatedness of the job to training. When making recommendations for program improvement, related employment was significant for only one suggestion—training needs to be more like the real job.

The program area in which alumni were trained was more important in explaining responses in seven of the eleven employment aspects rated for program effectiveness. The program area was significant in explaining responses in five of the eleven recommendations for improvement.

The relatedness of the job to the training taken appears to have little significance in influencing alumni assessments of training contributions to employability and their recommendations for program improvement. However, the program areas in which alumni were trained are of some importance in these two questionnaire items.



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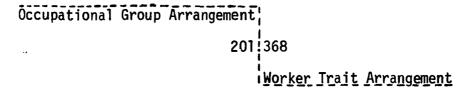
JOBS HELD BY RESPONDENTS EMPLOYED AT THE TIME OF THE SURVEY BY D.O.T. CLASSIFICATION, STATE AND REGIONAL TOTALS WITH RELATED INSTRUCTIONAL PROGRAM

EXPLANATION OF THE D.O.T. CODE

The D.o.T. coding system explained in <u>Dictionary of Occupational</u>

<u>Titles</u> defines 21,741 separate occupations for which there are 35,550

titles. These occupations have been classified and identified by 6-digit numbers. The structure consists of two arrangements of jobs--The Occupational Group Arrangement and the Worker Traits Arrangement. Jobs having the same basic occupational or worker traits characteristics are grouped so that various relationships among occupations can be discerned.



OCCUPATIONAL GROUP ARRANGEMENT

All occupations are grouped into nine broad categories according to work field, purpose, material, product, subject matter, service, generic term, and/or industry. These nine categories are identified by the number 0-9 reflected in the first digit of the code number, as follows:

- Ohrofessional, technical, and managerial occupations
- 2 Clerical and sales occupations
- 3 Service occupations
- 4 Farming, fishery, forestry, and related occupations
- 5 Processing occupations
- 6 Machine trades occupations
- 7 Bench work occupations
- 8 Structural work occupations
- 9 Miscellaneous occupations

The nine occupational categories are divided into 84 broad subject matter divisions, reflected in the first and second digits of the code.



In turn, the 2-digit divisions are subdivided into 603 specific subject matter 3-digit groups.

Example:

201.XXX

2

Occupational Category

CLERICAL AND SALES OCCUPATIONS

This category includes occupations concerned with preparing, transcribing, transferring, systematizing, and preserving written communications and records; collecting accounts; distributing information; and influencing customers in favor of a commodity or service. Includes occupations closely identified with sales transactions even though they do not involve actual participation.

20

Division

STENOGRAPHY, TYPING, FILING, AND BELATED OCCUPATIONS

This division includes occupations concerned with making, classifying, and filing records, including written communications.

201.

Group

Secretaries

This group includes occupations concerned with carrying out minor administrative and general office duties in addition to taking and transcribing dictation. Occupations concerned primarily with taking and transcribing dictation are included in Group 202.

WORKER TRAIT CHARACTERISTICS

The last three digits (to the right of the decimal) of the six digit D.O.T. Code identify worker functions in relation to Data, People, and Things. The relationships expressed in the three hierarchies are ordered from the most complex significant relationship of the occupation to the least complex relationship. The least complex significant relationship (as illustrated in Table A-1) would be XXX.888. The most complex job possible would correspond to a D.O.T. code of XXX.000. A job with a D.O.T. code of XXX.808 represents a worker function with high complexity in one dimension only (with relationship in this example to People).



TABLE A 1 RELATIONSHIPS WITHIN DATA, PEOPLE, THINGS HIERARCHIES FROM THE DICTIONARY OF OCCUPATIONAL TITLES

DATA (4th digit)	PEOPLE (5th digit)	THINGS (6th digit)
O Synthesizing Coordinating Analyzing Compiling Computing Computing Comparing Comparing No Significant relationship	<pre>0 Mentoring 1 Negotiating 2 Instructing 3 Supervising 4 Diverting 5 Persuading 6 Speaking-Signaling 7 Serving 8 No significant relationship</pre>	O Setting-up 1 Precision working 2 Operating-Controllin 3 Driving-Operating 4 Manipulating 5 Tending 6 Feeding-Offbeating 7 Handling 8 No significant relationship

DATA: Information, knowledge, and conceptions, related to data, people, or things obtained by observation, investigation, interpretation, visualization, mental creation; incapable of being touched; written data take the form of numbers, words, symbols; other data are ideas, concepts, oral verbalization.

- O Synthesizing: Integrating analyses of data to discover facts and/or develop knowledge concepts or interpretations.
- Coordinating: Determining time, place, and sequence of operations or action to be taken on the basis of analysis of data; executing determinations and/or reporting on events.
- 2 Analyzing: Examining and evaluating data. Presenting alternative a actions in relation to the evaluation is frequently involved.
- 3 <u>Compiling</u>: Gathering, collating, or classifying information about data people, or things. Reporting and/or carrying out a prescribed action in relation to the information is frequently involved.
- 4 <u>Computing</u>: Performing arithmetic operations and reporting on and/or carrying out a prescribed action in relation to them. Does not include
- 5 Copying: Transcribing, entering, or posting data.
- 6 Comparing: Judging the readily observable functional, structural, or compositional characteristics (whether similar to or divergent from obvious standards) of data, people, or things.



PEOPLE: Human beings; also animals dealt with on an individual basis as if they were human.

- Mentoring: Dealing with individuals in terms of their total personality in order to advise, counsel, and/or guide them with regard to problems that may be resolved by legal, scientific, clinical, spiritual, and/or other professional principles.
- Negotiating: Exchanging ideas, information, and opinions with others to formulate policies and programs and/or arrive jointly at decisions, conclusions, or solutions.
- 2 Instructing: Teaching subject matter to others, or training others (including animals) through explanation, demonstration, and supervised practice; or making recommendations on the basis of technical disciplines.
- 3 <u>Supervising</u>: Determining or interpreting work procedures for a group of workers, assigning specific duties to them, maintaining harmonious relations among them, and promoting efficiency.
- 4 Diverting: Amusing others.
- 5 Persuading: Influencing others in favor of a product, service, or point of view.
- 6 Speaking-Signaling: Talking with and/or signaling people to convey or exchange information. Includes giving assignments and/or directions to helpers or assistants.
- 7 <u>Serving</u>: Attending to the needs or requests of people or animals or the expressed or implicit wishes of people. Immediate response is involved.

THINGS: Inanimate objects as distinguished from human beings; substances or materials; machines, tools, equipment; products. A thing is tangible and has shape, form, and other physical characteristics.

- O Setting Up: Adjusting machines or equipment by replacing or altering tools, jigs, fixtures, and attachments to prepare them to perform their functions, change their performance, or restore their proper functioning if they break down. Workers who set up one or a number of machines for other workers or who set up and personally operate a variety of machines are included here.
- Precision Working: Using body members and/or tools or work aids to work, move, guide, or place objects or materials in situations where ultimate responsibility for the attainment of standards occurs and selection of appropriate tools, objects, or materials, and the adjustment of the tool to the task require exercise of considerable judgment.
- Operating-Controlling: Starting, stopping, controlling, and adjusting the progress of machines or equipment designed to fabricate and/or process objects or materials. Operating machines involves setting up



the machine and adjusting the machine or material as the work progresses. Controlling equipment involves observing gages, dials, etc., and turning valves and other devices to control such factors as temperature, pressure, flow of liquids, speed of pumps, and reactions of materials. Setup involves several variables and adjustment is more frequent than in tending.

- 3 Driving-Operating: Starting, stopping, and controlling the actions of machines or equipment for which a course must be steered, or which must be guided, in order to fabricate, process, and/or move things or people. Involves such activities as observing gages and dials; estimating distances and determining speed and direction of other objects; turning cranks and wheels; pushing clutches or brakes; and pushing or pulling gear lifts or levers. Includes such machines as cranes, conveyor systems, tractors, for mace charging machines, paving machines, and hoisting machines. Excludes manually powered machines, such as handtrucks and dollies, and power assisted machines, such as electric wheelbarrows and handtrucks.
- 4 Manipulating: Using body members, tools, or special devices to work, move or guide, or place objects or materials. Involves some latitude for judgment with regard to precision attained and selecting appropriate tool, object, or material, although this is readily manifest.
- 5 Tending: Starting, stopping, and observing the functioning of machines and equipment. Involves adjusting materials or controls of the machine, such as changing guides, adjusting timers and temperature gages, turning valves to allow flow of materials, and flipping switches in response to lights. Little judgment is involved in making these adjustments.
- 6 Feeding-Offfbearing: Inserting, throwing, dumping, or placing materials in or removing them from machines or equipment which are automatic or tended or operated by other workers.
- 7 Handling: Using body members, handtools, and/or special devices to work, move, or carry objects or materials. Involves little or no latitude for judgment with regard to attainment of standards or in selecting appropriate tool, object, or material.

Note: Included in the concept of Feeding-Offbearing, Tending, Operating-Controlling, and Setting Up, is the situation in which the worker is actually part of the setup of the machine, either as the holder and guide of the material or holder and guider of the tool.

RELATED INSTRUCTIONAL PROGRAMS: Table A2 lists the jobs held by respondents employed at the time of the strvey by D.O.T. classification. In the last column the related instructional programs have been identified. This matching of job by D.O.T. classification to instructional programs was taken from the document Vocational Education and Occupations a U.S. Department of Health, Education, and Welfare, Office of Education publication. Other publications utilized in this matching included Vocational and Technical Education:

Descriptions, Definitions and O.E. Coding an Illinois Division of Vocational and Technical Education document and Occupational Training Information System: Cycle Two Report, by Paul V. Praden and associates, Oklahoma State University.



TABLE A 2

JOBS HELD BY EMPLOYED RESPONDENTS AT THE TIME OF THE SURVEY BY D.O.T. CLASSIFICATION, STATE AND REGIONAL TOTALS WITH RELATED INSTRUCTIONAL PROGRAM

Clusters of Occupations	JOBS	STATE	TE			REC	REGION				TRAINING PROGRAM
ONAL, TECHNICAL, AND * 0 0 0 1 0 0 1 0	Clusters of Occupations and D.O.T. Code	Tot	als	Cook Co.	н	II	III	ΙV	>	I۸	ted Instruction
Draftsman, Architectural 1 * 0 </td <td>. ائـ ا</td> <td></td>	. ائـ ا										
Technician, Electrical or Electronic Electronic Foundation Civil Engineering Foundation Chainman Chainman Laboratory Assistant, Foundatory Helper Lavoratory Assistant or Fotol Foundation Fotol	Draftsman, Draftsman, Draftsman, Draftsman, Draftsman,	20 3 3 1		008	0-004	00000	0000-	-0-00	00-0-	00000	E17.1300 Drafting
Technician, Electrical or Electronic Electro	Total	56	•	10	5	9	-	2	2	0	
Technician, Civil Engineering	Technician, Electronic	ည	0.1	2	_	0	-	-	0	0	Electrical Electronic Instrumenta
Laboratory Assistant, Metallurgical Laboratory Technician, Chemical Chemical Chemist Helper Lavoratory Assistant or Tester (industry) Laboratory Assistant or Total 13 0.4 4 2 1 1 2 1 2 1 2			* * * *	0000	0000	000-	0000	0-00	00-0	-000	Civil Techn
Chemical Che		-	*		0	0	0	0	0	0	
Laboratory Assistant or 1 * 1 0 0 0 0 0 0 0 0 0 0 Tester (industry) Total 13 0.4 4 2 1 1 2 1 2			* *	00	0 -	00	00	၁၀	00	0 ~1	
13 0.4 4 2 1 1 2 1		_	*	_	0	0	0	0	0	0	0690
	Total	13	•	4	2	1	_	2	_	2	

"Not Elsewhere Classified"--is used with certain division and group headings to indicate that only the occupations not classifed in a more specific group are included.



JOBS	STATE	Ξ.			REC	REGION				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals	S s	600 k	⊢	II	III	> I	>	ΙΛ	Related Instructional Program Name and O.E. Code
074.387 Pharmacy Helper	5	0.1	2	0	-	-	0	0		
078.368 Technician, Medical or Dental		*	0	-	0	0	0	0	- 6	response (Associate Degree)
Ţ.							<u> </u>			:: : : : : : : : : : : : : : : : : : :
										107.0901 Electroencephalograph Technician L07.0902 Electrocardiograph
078.381 Laboratory Assistant Medical	ស	0.1	8	0	0	2	-	0	0	F07.0202 Histology
										Assisting LO7.0503 Nuclear Medical Technology
079.368 Assistant, Attendant, Aid, Medical Therapy, n.e.c.**	۳.	~	0		C	c		u		-07.0401 Occupational Therapy -07.0903 Inhalation Therapy -07.0904 Medical Assistant
079.378 Dental Assistant, Practical urse; Other Medical Service			J	1	1	•	1)		Dental A
Technicians, n.e.c.**	34	6.0	α	9	9	4	Ω.	m		Nursing -07.0305 Surgical Technician
079.588 Diet Clerk, Aid (Medical) (Also see 355.878)	2	0.1	0	-	0	0	0	0	-	-07.0306 Obsterrical Technician -07.06C2 Orthoptics
Total	09	1.7	14	2	6	7	80	8	4	

JOBS	STATE			RE	REGION				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals f	6 <mark>6</mark>	I	II	III	١٧	>	١٨	Related Instructional Program Name and O.E. Code
092.228 Teaching Aide-primary	-	0	0	0	0	0	-	0	
Tutors, Aides	5 0.1	2	2		0	0	-	0	
Total	6 0.2	2	2	0	0	0	2	0	
120.108 Minister	~ ~	*	0	0	0	0	0	-	
Total	-	• •	0	0	0	0	0		
132.038 Editor 132.268 Reporter	2 0.1	0	00	00	00	0	00	-0	
Total	3 0.1	-	0	0	0		0		·
141.081 Advertising, Art Layout Man 142.081 Floral Designer 143.062 Photographer, Newspaper	3 5 0.0	-20	1	0	0 - 0	0-0	0	000	C04.0100 Advertising Services C17.0700 Commercial Art Occupations -04.0500 Floristry
149.281 Architectural Modeler	1 0.0		0	0	0	0	0	0	Occupation Architectur
Total	10 0.3	4	-	2	,	-	-	0	(Building Construction)
153.348 Professional Athlete 153.874 Exercisor, Horse 159.148 Announcer, Radio-TV 159.228 Bridge Instructor	1 0.0 1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0000	00	00	0000	00-0	0000	0000	!
Total	5 0.1	0	2	2	0		0	0	



TRAINING PROGRAM	Related Instructional Program Name and O.E. Code	-04.9900 Distributive Education;	L04.0800 General Merchandise L04.0100 Advertising Services -01.0401 Food Products -14.0899 Supervisory and Administrative Management	-04.1200 I -04.0100 A -14.0602 I	1 07 0703	FO. 10703 Same and Assistant FOI.0400 Agricultural Products FOI.0401 Food Products FOI.0605 Water	.2899 P	Other LO4.1600 Petroleum		-04.0700 Food Services -04.0800 General Merchandise -04.1600 Petroleum -04.1700 Real Estate -04.3100 Wholesale Trade
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	۱۱	2		0-0	00)		3	2	
REGION	111	-		000	00			,	2	
REG	11			080	00		<u>. </u>	3	m	
	⊢	0		00-	0 -	<u>.</u>	<u>· </u>	2	9	
	600k 60.	3		-00	00	>		4	ည	·
3	26	0.2		* *	* -	;		0.4	0.5	
STATE	Totals f	_		- ~ -	- 0	ı		15	19	
JOBS	Clusters of Occupations and D.O.T. Code	162.158 Buyer, Purchasing Agent;	Buyer, Agricultural Produce; Supply Requirements Officer	163.118 Manager-Sales, Circulation 164.068 Advertising Assistant 166.088 Job Analyst	166.268 Employment Interviewer			Total	185. Wholesale and Retail Trade Managers and Officials:	Food Concession Store Merchandise



J08S	STATE	101			RE	REGION		į		TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals	96	Cook	1 -4	II	111	λI	>	١٨	Related Instructional Program Name and O.E. Code
187.118 Manager, Hotel-Motel		*	-	0	0	0	0	0	0	-04.1100 Hotel-Lodging
Officials:	. 27	0.8	6	က	. 8	4	77	4	_	
										-04.0300 Automotive Services -04.0900 Hardware, Building
										Garden Supplies &
Appliance Service Travel Office							*			-04.1000 Home Furnishings -04.100 Hotel and Lodging
Barber and/or Beauty Shop;										
Launury Building										-04.1700 Real Estate
Amusement and Recreation Facilities										-04.1800 Recreation and Tourism
Lunchroom; Cafeteria				-						
Housekeeping (Medical Serv.)			-							Production & Services -09.0204 Institutional & Home
Food and Beverage (Hotel and		-								services -17.2900 Quantity Food Occupations
188.168 Manager, Food Processing	•	4	•	•				•		-01.0401 Food Products
189.168 Management Trainee	- ro	0.1	- 4	00	5 -	00	0	00	0	-04.0800 General Merchandise
Total	53	1.5	20	=	9	9	4	5		
191.168 Service Representative;	က	0	<u></u>	0	0	_	0	0	_	-04.0300 Automotive
195.168 Director, Recreation Center		*	,	0	-0	0	0	0	0	- -04.18 Recreation and Tourism



TRAINING PROGRAM	Related Instructional Program Name and U.E. Code	-16.0601 Commercial Pilot Training			-14.0702 Secretaries -14.0703 Stenographers -14.0902 Typists -14.0402 Correspondence Clerks -14.0603 Personnel Assistants -14.0302 File Clerks
	٧I	0-00 0	7	12	15 4 L 40 00 1
	>	0000 0	0	20	er 8 0 80 0 0 r
	ΛI	0000 -	1	23	¥ r 0 00000 4
REG I ON	III	0-00 0	2	19	7 - 0 0000 0
RE	II	0000 0	0	30	1E 0 4 0 0 E E
	H	-000 0	1	36	59
	600k 60.	00	5	64	97 1 16 1 16 1 3
ITE	Totals	* - * * -	0.3	5.7	7.6 1.3 1.4 0.1 8.0
STATE	Tot	-2 2	=	204	272 48 51 1 51 18
JOBS	Clusters of Occupations and D.O.T. Code	193.282 Radio Dispatcher 194.782 Recording Machine Operator 195.108 Social Caseworker 196.283 Airplane Pilot, Commercial 199.388 Planning Assistant; Program	Total	TOTAL: PROFESSIONAL, TECHNICAL, AND MANAGERIAL OCCUPATIONS	CLERICAL AND SALES OCCUPATIONS 201.368 Secretaries, including, Legal and Medical 202.388 Stenographer; Stenotype Operator 203.138 Typist, Chief; Telegraphic Typewriter Operator; Chief 203.588 Typist-Clerk; Telegraphic Typewriter Operator 204.288 Correspondence Cierk 204.388 Sales Correspondent 205.138 Personnel Clerk, Supervisor 205.368 Employment-Personnel Clerk 206.388 File Clerk; Library Clerk;



Clusters of Occupations and D.O.T. Code 207.782 Duplicating Machine Operator I Mimeograph Operator Automatic Typewriter Operator IV Stencil Cutter Operator IV Stencil Cutter Operator IV Stencil Cutter Operator IV Photocomposing Machine, Perforator Operator; Iypesetter Perforator Operator Collator Operator Statement Clerk; Tax Clerk Statement Clerk; Tax Clerk Collerk Collerk Collerk Statement Clerk; Mortgage Clerk; Collerk Collerk Collerk; Mortgage Clerk; Statement Clerk; Marker; Collerk Collerk Collerk; Marker; Collerk Collerk; Marker; Collerk; Marker; Collerk; Marker; Collerk	Totals 7 1 6.3 1 6.3 4 0.1 2 0.1 7 0.2	Cook Co. 103	1 0 0 1 2 2 2 2 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	REGION 1111 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0	31 0 00 0 2	> 0 00 02 000	V I V I S I S I S I S I S I S I S I S I	Related Instructional Program Name and O.E. Code [14.0301 Duplicating Machine Operator Operator [14.0901 Clerk-Typists and General Office Occupations Occupations -04.0800 General Merchandise -14.0502 Quality Control Clerks
Total 735	5 20.4	254	166	9/	49	82	89	40	ייייטטע למפווכל כטונים כיפוראי
210.368 Account Information Clerk 2 210.388 Bookkeeper 61	2 0.1	15	80	0 9	2	09	12	06	[14.0102 Bookkeeper



JOBS	ST	STATE			RE(REG I ON				TRAINING PROGRAM
Clusters of Occupations	Tot	Totals	Cook		;	,	;	:	•	ed Instruction
and D.O.I. Code	-	3-6	3		=	Ξ	2	>	7	Program Name and O.E. Code
211.368 Cashier, Front Office 211.468 Cashier, Customer	45	1.3	101	<u></u> б-	12	е 0	40	4-	6 4	604.0103 Cashiers F04.0600 Food Distribution
							_			0800
								_		-04.7100 Hotel and Lodging
										006
212.368 Bank Teller	43	1.2	-	∞	4	.0	4	6	_	0105
213.382 Computer Operator	15	0.3	5	_	_	r-	2	2	0	
-		1	(,				Systems Occupations
213.582 Key-punch Uperator	45	1.2	12	7	00	4	4	_	2	-14.0201 Computer and Console
213 568 Nata-Tynist	~	-	0	_	C		c	c	_	
	J 	;	J	•	5	5	5	>	>	Operators
213.885 Sorting Machine Operator	_		_	0	0	0	0	0	0	
215.388 Bookkeeping Machine Operator	∞	0.5	က	_	0	0	2	;	_	r14.0104 Machine Operators,
216.488 Calculating Machine Operator	က	•	က	0	0	0	0	0	0	- Billing, Bookkeeping
217.388 Proof Machine Operator	<u> </u>	4.0	90	~	<u> </u>	0	0	2	0	- and Computing
Payroll Clerk	، در	•	2	<u> </u>	0	0	0		0	
216.588 FOOD UNECKER (Lateteria)	— c	k r	0	_ o,	_ (0	0	0	0 (.0600 Food Distributi
219.138 Time Keeper		 O	0	_	0	0	0	_	0	rl4.0199 Accounting and Computing
219.368 Brokerage Clerk		*	0	0	0	0	0	_	0	S
219.388 General Office Clerk; Billing	55	.5	14	17	6	2	7	က	က	-
				-						
219.488 Account Clerk; Cost Clerk;	9[0.4	9	7	0	0	_	7	0	-14.0303 General Office Clerk
				_		•				
219.588 Posting Clerk; Voucher Clerk	4	0.1	0	0	2	0	0	0	~	-1
Total	339	9.4	101	75	44	22	32	40	25	



JOBS	STATE	ш			RE(REGION				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals	25	Cook Co.	I	II	III	ΙV	>	I۸	Related Instructional Program Name and O.E. Code
221.388 Order Clerk; Production Clerk	5	0.1	0	4	-	0	0	0	0	-14.0501 Planning and Production
222.138 Rate Clerk; Shipping Clerk 222.368 Expeditor	4 0	0.1	-13	00	00	r= 0	00	C L	00	Clerks 14.0503 Shipping and Receiving F
Clerk Clerk 222 507 Distributing Clerk	47	1.3	<u> </u>	<u>N</u>	4	က	2	_	4	1_
Return Man 222 687 Receiving Checker: Shipping	က	0.1		0	-	2	0	0	_	
	2	0.1	2	0	0	0	0	0	0	70040
	45	1.3	12	15	က	က	ო	4	J.	Fi4.0504 Stock and inventory clerks
223.388 Inventory Clerk 223.587 Laboratory Helper (clerical)	-	0 .2 *		C	⊘ ⊘	00	- c	_ c	o c	اـــــــــــــــــــــــــــــــــــــ
Mail Ord	. 2	0.1		0	0	0	0	_	0	
223.687 Checker (Bakery Products)	- ~	* -	C	0 0	00	00	00	00	ÖC	-04.0600 Food Distribution
Weigher	ا ش رـــــــــــــــــــــــــــــــــــ	*	000	100		000	- c) — C	0 -	Material
l l	126	3.5	6 [4	34	12	9 6	10	9	11	- occupations, other
230.878 Messenger; Office Boy	ß	0.1	4	0	0		0	0	0	-14.0405 Messengers and Office
231.388 Parcel Post Clerk 231.588 Mail Clerk 231.687 Express Messenger; Shipper	242	0.1	090	000	_ w \	-0 m	04-	000	0-0	boys and Giris
232.388 Mail Carrier	10	e.*	7	0	0	00	00	00	00	



JOBS	ST	STATE			RE(REGION				TRAINING PROGRAM
Clusters of Occupations	Tot	Totals	Cook					:		struction
and D.O.T. Code	4-	9-6	S	н	II	III	ΛI	>	5	Program Name and O.E. Code
234.582 Addressing Machine Operator		*	0	0	0	_	0	0	0	-14.0404 Mail Preparing and Mail
235.138 Telephone Operator; Chief	2	0.1	8	0	0	0	0	0	0	Handlir F14.0401 Communic
board Operator	38		13	15	2	0	0	5	_ M	Lerks and Operators
237.168 Travel Counselor 237.358 Receptionists	61	0.1	20	°=	0 &	20	- 9	10	00	-04.1900 R -14.0406 R
239.368 Counter Clerk		+ k +	- (0,	0	0	0	0	0	Information C -14.0499 Information Cc
239.588 Meter Keader	-	k	0	_	0	0	0	0	0	- Occupations; Other
Total	146	4.1	55	31	17	F	12	16	4	
	LC	* -	- c	0,4	00	0.	00	0 -		General Merchandise
240.388 Collection Clerk) 	* -	00-	, O .	00	-00) — r	-00		FI4.9900 Office Occupations; Other F
	+ ,	-	- (_	-	_	0	o 	
lelegraph) 241.168 Claim Adjuster		* *	0-	-0	00	00	00	00		L r04.1300 Insurance
	~	0.1	_	_	0	0	0	0	-	0066
249.368 Credit Clerk; Reservation	34 %	0.0	0 9	0 4	0 %	0 -	ପ ପ	0 m	<u> </u>	-04.1300 Insurance r14.0499 Information Communications
Claims Clerk							-			Occupations; Oth Office Occupation
										L14.0602 Interviewers and Test Technicians



TRAINING PROGRAM	Related Instructional VI Program Name and O.E. Code	C04.0100 Advertising Services -04.04.0900 Finance and Credit -04.0900 Hardware, Building, Materials, Farm and Garden Supplies & Equipment -04.9900 Distributive Education; Other	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 0	0 0 -04.0100 Advertising Services	0 0 C04.0100 Advertising Sales L04.1200 Industrial Marketing	0 0 -04.0500 Floristry 0 0 -01.0202 Feeds
	Λ .		- 000	5			0 0
×	VI IV		0 000	2	0	0	0 -
REGION	III III		0 000	6	0	0	- 0
	I	 	0 700	22		<u> </u>	0 0
	Cook		2 0	16	r		0 0
STATE	Totals (1.6	0.1	*	* *
S	TC	4	e 2	28	2	2	
J0BS	Clusters of Occupations and D.O.T. Code	Counter Clerk; Safety Deposit Clerk; Accounts Teller; Contract Clerk	249.388 Medical Record Clerk; Forms Analyst 249.588 Station House Clerk; Ticket Counter 249.868 Process Server 249.887 Clerk; Draftsman	Total	253.358 Salesman, Radio and TV time	258.358 Salesman, Advertising #	260.458 Salesperson, Flowers 262.358 Salesperson, Feed Products (wholesale trade)

All Sales Occupations, D.O.T. Codes 250. to 299. are totaled together; See page 14.

J08S	STATE	H			REG	REG I ON				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals	ر بور	Cook	I	II	III	ΛI	۸	IA	Related Instructional Program Name and O.E. Code
263.358 Salesperson, Textiles, Shoes, Clothing (wholesale trade)	15	0.4	Ŋ	2	4	-	-	2	0	104.1200 Industrial Marketing 104.3100 Wholesale Trade; Other 104.0200 Apparel and Accessories
263.458 Salesperson, Yard Goods, Clothing (retail trade) 266.358 Salesperson, Cosmetics	16 3	0.4	0 3	ကက	0 0	0	0	0	00	General Mer
	2	0.1	0		0	0	F	0	0	i
2/6.358 Salesperson, Hardware, Building Supplies	7	0.2	r	2		0	0	0	က	FU4.1000 Home Furnishings LO4.0200 Apparel and Accessories .04.0900 Hardware, Building
										Materials, Garden Sup
										1500
278.258 Salesperson, Hi-Fi;	_	*	0	0		0	0	0	0	r v
278.358 Salesperson, Appliances Salesperson, Household Equipment	2	0.1	0	0	P	0	0	_	0	
280.358 Salesperson, Transportation	4	0.1	6	2	6	-	C	0	-	C04.0300 Automotive
283.358 Salesperson, Jewelry, Siver-ware		*	0	, p	0	0	0	0	0	
285.358 Salesperson, Photographic Supplies and Equipment	8	0.1	2	0	0	0	0	0	0	 1



JOBS	STATE	TE			REC	EGION				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Tot	Totals %	60°k 60°k	H	II	III	١٧	>	ΙΛ	Related Instructional Program Name and O.E. Code
286.358 Salesperson, Sporting Goods 289.358 Salesperson, General	_	*	0	-	0	0	0	0	0	1800
merchandise Books, Novelties, Parts, etc.	c. 12	0.3	က	r.	m	0	0	_	0	.0500 Floristry .1200 Industrial .1800 Recreation
		1.7	18	14	- 6		7	വ	4	04.3100 Wholesale Trade; Other L04.0200 Retail Trade; Other r04.0800 General Merchandise
290.338 Electric motor kepair Lierk 290.478 Sales Clerk, Retail Trade	- 9	0.2	- 2	o ~	00	00	0 -	00	0 -	لىدا.
290.468 Groceryman 290.877 Grocery Clerk	36	0.0	21	0 -	<u>س</u> ح	000	. m c	2 د	- 70 0	-04.0600 Food Distribution
	<u>-</u>	0.3	· –	- ഹ	2	-	· -		0	1 1
		* 0	0 5	- 5	0 0	0,	0	0	0,	
299.587 Bakery Girl	÷ "	 0	4 ~	0	D C	-0	70	4 -	- c	1 1
	_	*	0	0	0	· –	0	- 0	0	- -04.1500 Personal Services
	ле 3	0.1	_	0	0	0	·		0	000
SOLICITOR 297.458 Demo nstrator	_	*	0	_	C	C	C	C	<u>_</u>	L04.1800 Recreation Tourism
		*	0	0	0	0	· –	0	0	מממח מבוובו שו
298.08 Displayman-Window Decorator	ကင္		2 -	0 4	0 \$	 (0 -	0 -	0	.0100 Adver
	<u>-</u>	†	-	0	3	>	_		>	04.0600 Food Distribution LO4.0800 General Merchandise
299.381 Carpet-Tile Layer	4	0.1	0	0	_	0	2	0	_	1009 Construc
200 478 Contact Lone Tachairen		c	r	-	C		•	•		Irades; (.0300 Home Furni
299.887 Stock Girl, Women's Apparel	7 –	*	- 0		00	0	0		00	.0601 Uptnalmic Di .0800 General Merc
250 299. Total	268	7.4	71	82	43	13	24	22	13	-04.0200 Apparel and Accessories



ON TRAINING PROGRAM	Related Instructional II V VI Program Name and O.E. Code	106 165 159 93	0 0 0 0 E09.0205 Institutional and Home 0 0 0 0 E Management and Supporting Services	12 18 14 9 -04.070C Food Services 12 18 14 9 -09.0203 Food Management; Production 2 0 0 0 -17.2904 Waiter/Waitress 3 0 -17.2901 Baker 1 0 0 0 -17.2901 Baker 1 0 0 0 -1 -09.0203 Food Management; Production 2 3 0 -17.2903 Meatcutter 3 0 0 0 -1 -17.2903 Meatcutter
REGION	II II I	410 201 10	000 0	24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	Cook Co.	538	000 0	
STATE	Totals f %	1672 46.4	e	3 0.1 60 1.6 60 1.6 1 1.
3085	Clusters of Occupations and D.O.T. Code	TOTAL: CLERICAL AND SALES OCCUPATIONS	SERVICE OCCUPATIONS 301.887 Day Worker (domestic service) 303.138 Housekeeper 306.878 Maid, General	310.868 Hostess, Restaurant 311.878 Waiter, Waitress, Counterman Busboy; etc. 319.878 Fountain Man 313.131 Chef-Head Cook 313.381 Cook; Food Service Worker 313.781 Baker 314.781 Cook, Speciality 317.884 Pantryman, Sandwichman 318.887 Kitchen Helper 317.887 Cook Helper 319.884 Food Assembler 319.884 Food Assembler 319.887 Counter Supplyman 316.884 Butcher; Meatcutter



Spotman, Usher

343.138 344.878 342.863

342.858 342.867

Ride Operator

357.878 P 358.878 B 355.687 C 355.878 N

352.878



Program Name and O.E. Code

5

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1

III

Ξ

. ප Cook

95

321.138 Housekeeper (hotel, medical

services

323.887

Salon Attendant

Cosmetologist

330.371 332.271 334.878

Barber

Clusters of Occupations and D.O.T. Code

Totals

REGION

STATE

JOBS

Related Instructional

TRAINING PROGRAM

JOBS	STATE	TE			REC	REG ION				TRAINING PROGRAM
Clusters of Occupations and 0.0.T. Code	Tot	Totals %	Cook Co.	I	II	III	ΙΛ	>	I۸	Related Instructional Program Name and O.E. Code
356.874 Veterinary-Hospital Attendant Animal Caretaker (medical	2	0.1	2	0	0	0	0	0	0	.0299
services) 359.878 Child Care Aid (governmental services) Kindergarten	4	0.1	-		_		0	0	0	LO1.99 Agriculture; Other -09.0201 Care and Guidance of Children
Total	991	4.6	40	32	82	24	13	14	14	
361.782 Rug Cleaner 361.885 Laundryman 361.887 Laundry Laborer 363.782 Presser Machine (clean due		* * *	000	000	000	000	0-0	-0-	000	F17.1602 Laundering F17.1601 Dry Cleaning
	2-	•	-000	0000,	0000	000-	0-00	00-0	00-0	
1	م 1	0.4	- 2		ກ ຕ	1 0	0	O M	- 2	_1
372.868 Watchman 375.268 Patrolman 376.868 Investigator; security man 379.268 Driver's License Examiner 379.368 Radio Dispatcher 379.868 Lifeguard	22	* * * *	000-0%	0-0000	0 - 0 -	00000	0000	0000-0	00000	[17.2802 Law Enforcement Training
Total	18	0.5	9	_	က	က	2) 	ام ا	
381.887 Cleaning maid; Porter; Cleaner, Laboratory Equip.	9	0.2	2	_	-	0	2	0	0	-17.11 Custodial Services





JOBS	STATE			RE	REGION				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals	60 k		11	III	١٧	^	IV	Related Instructional Program Name and O.E. Code
421.181 Farmer, General 421.883 Farm Hand, General Total	16 0. 43 1.	408	000	4 01	6 15	သက	30 5	_ w ⊿	[01.0100 Agricultural Production
441.887 Forest Fire Fighter Total			00	00	00)	00	00	-01.0601 Forests
TOTAL: FARMING, FISHERY, FORESTRY, & RELATED OCCUPATIONS	102 2.	80	5 14	16	27	12	19	6	
PROCESSING OCCUPATIONS 500.884 Plater (electronics) 504.782 Metal Spraving Machine	-	*	0	0	0	_	0	0	[17.2399 Metalworking; Other
Operator 500.886 Laborer, Electroplating 502.884 Rlast Furnace Caster: Mold		* *	0-	00	00	-0	00	00	
Setter 502.887 Blast Furnace Helper	- -	* *		00	00	0 -	- c	00	[17.230] Foundry
		* *		00	00	0-	0-0	000	 -17.2400 Metallurgy
	2 0.	0		0	0	0	0	0	
steel) Total	4 0. 13 0.	1 3	1 4	0	00	04	0 8	00	
510.885 Mixer (iron and steel) 512.782 Furnace Operator 512.883 Furnace Charger		* * *	000	000	1 0	0	0	000	[¹⁷ .2301 Foundry
		, -	_	, -	, _	<u> </u>	_	>	



	SIAIE	-	-	REC	REG ION	ŀ			TRAINING PROGRAM
Clusters of Occupations and 0.0.T. Code	Totals	% S S S	H	H	III	IV.	>	IA	Related Instructional Program Name and O.E. Code
Pig-Machine Operator Helper Bench Molder	- «	* -		00	00	0-	0.	00	rl7.2301 Foundry
Foundry Laborer Sampleman, Repairman) 	-* *	-00	000	000	-00		200	
Laborer, General (non-ferrous alloys)	_	*	0		0	0	0	0	
Total	10 0.3	3 2	-			 -	4	0	
Processor, Grain Batter Mixer, Blender (food	2 0.1		0	0	0	0	_	0	_f 01.0202 Feeds
preparation)	4 -	*-		00		mc	00	00	7.2901 Baker
Butcher, Slaughterhouse Buttermaker, Cheesemaker		*		50	-0	0		00	Ful.U4UI roog Products
	ر د	* 0	o r	0.0	0 -	 (0 -	0	
Cooker Cleaner, Cook Helper	? * > -			<u>ა</u> ⊂		N C	<u> </u>	~ 0	المال
Baker (bakery products) Kettle Cook (canning and	_	*	-	00	-0	00	0	0	_17.2901 Baker
preserving)	-	*		0	0		0	0	-17.2999 Quantity Food Occupations:
bougnnut maker Baker Helper-bakery products	6 0.2	3 3	- 8	00	00	0 -	00	00	Other Baker
Total	29 0.8	8	4	3	4	8	ო	2	
534.782 Paper Coating Machine	•								
Uperator Inspector, Paper		- O * *	00	00	0 ~	00	00	00	-16.0111 Industrial Technology
Total	2 0.1	_	0	0		0	0	0	

TRAINING PROGRAM	Related Instructional Program Name and O.E. Code			F17.2700 Plastics Occupations	.,						
	۸I	000	0	0000	00000	0	0	000	<u> </u>	0000	
	>	0-0	-	N000	-0000	3 0	_	00-	0	00-0	
	٨١	-00	-	0000	0-00	o	0	0	0	0-00	
REG10N	III	000	0	0-00	00000	ے د	0		0	0000	
REC	II	000	0	00-0	00000		7	000	0	00	
	~	000	5	0004	000-	- 9	0	000	-	-000	
	Cook	00-	F	0-00	00-00	2 0	0	000	0	0000	
STATE	Totals %	**0.2	0.2	00 0	* * * * *	0.4	0.1	* * *	*	* *	
ST	<u> ۴</u>	0	8	00-4		14	м		<u>-</u>		
JOBS	Clusters of Occupations and D.O.T. Code	542.782 Fireman (petroleum refinery) 542.884 Furnace Loader 549.887 Laborer, Petroleum Refinery	Total	550.885 Chemical Mixer, Blender 553.885 Drier Operator 556.780 Mold Setter 556.782 Molding Compressor Machine	556.886 Mold Stripper 557.782 Extruder Operator 558.886 Furnace Helper (chemical) 559.884 Tank Cleaner (chemical)			Hacker, Set-up M Brick Ma	575.887 Laborer (concrete production) 579.131 Foreman (concrete block	manuracturing) 579.687 Glass Inspector 579.782 Mixer (concrete production) 579.885 Insulation Machine Operator;	Laborer, Concrete Mixing Plant



J08S	STATE			REC	REGION				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals f %	Cook Co.	—	II	III	ΛI	>	١٨	Related Instructional Program Name and O.E. Code
579.887 Laborer, General (brick and tile)	*	0	0	0	-	0	0	0	
Total	15 0.4	0	2	4	က	3	3	0	
582.886 Drying Machine Back Tender (textiles) 585.687 Patcher; Inspector (leather) 589.887 Laborer, (textiles, dyeing)	***	000	000	-00	0-0	000	000	0	[17.3399 Textile Production and Fabrication; Other
Total	3 0.1	0	0	J	pres.	0	0	ť-	
599.885 Dipper; Glazer (any industry) Painting Machine Operator	*	0	0	0	0	-	_	0	
Total	2 0.1	0	0	0	0	_	_	0	
TOTAL: PROCESSING OCCUPATIONS	96 2.7	14	22	10	11	19	17	3	
MACHINE TRADES OCCUPATIONS						 			
600.280 Machinist; Maintenance Machinist; Patternmaker	20 0.6	- 5	∞	9	0	_	2	_	rl7.2302 Machine Shop
Machinist Apprentice 600.380 Machine Set-up Operator;	6 0.2	0	8	2	0		0	0	
609.885 Production Machine Operator 601.280 Die-Maker; Tool and Die Maker; Tool Machine Set-up	1 * 13 0.4	0 m	- e	0.50	00	00	0 -	0-	L 17.2307 Tool and Die Making L17.2308 Die Sinking
604.885 Lathe Operator, Screw-Machine Operator	4 0.1		0	F	- 2	0	0	°	-17.2302 Machine Tool Operator



JOBS	STATE	-		REC	REG I ON				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals	Sook Cook	н	II	III	۸۱	>	ΙΛ	Related Instructional Program Name and O.E. Code
605.782 Router Operator	-	*	_	0	0	-	0	0	-17 2303 Machine Tool Operator
	_	*	0	0	0	0	0	0	
		*			0	0	0	0	\$
	<u>ო</u>	<u> [] </u>		7	0		0	0	
COT 782 Cut_off Cam Operator	٠,			-	r	•	-		
	, ,	<u>-</u>	<u> </u>	5		 >		>	.
615.782 Punch Press Operator	ر د م	1.1	<u> </u>	0	0	0	<u></u>	0	
615.885 Shear Operator	-	• •		0	0		0	0	_1
Total	57	.6	15	17	ÿ	5	5	2	
614.782 Extruder Operator; Wire	,	- -	0	0	0	_	0	0	-17.2399 Metalworking; Other
Drawer 616.380 Machine Operator; Set-up Man	53	.5 14	<u></u>	0	80	9	22		-17.2304 Metal Trades. Combined
20.50	-	+	_			(-	•	.2305 Sheet Metal
616.685 Load Tester	-) C	> C	-	- c) C	[17.2400 Metallurgy
		*		0	0	0	0	0	-17.2304 Metal Trades, Combined
Bench		*	0		0	0	0	0	Metalworking;
	_	• *		_	0	0	0	0	
619.885 Machine Operator II; Brake		*		_	0	0	0	0	-1-
Operator									
	0 7	<u> </u>		0	0		0	0	-l.,
619.886 Machine Feeder	,-	*	_		C		_	c	
	· -	*	0	0	0) =	<u> </u>	0	
Total	64	1.8 15		14	00	α	7		
					,			-	





J08S	ST	STATE			RE	REGION				TRAINING PROGRAM
Clustons of Occupations	L	Totale	400)					-		Doloted Instanctions
	<u> </u>	8		Н	II	III	IV.	>	٧I	Program Name and O.E. Code
633.281 Office Machine Serviceman	2	0.1	-	0	_	0	0	0	0	-17.0600 Business Machine
637.281 Air Conditioning Mechanic; Domestic Refrigeration	2	0.1	2	0	0	0	0	0	0	Maintenance r17.01 Air Conditioning r17.0101 Cooling
G N		*	C		<u> </u>	-	c	c	c	-17.0202 Gas Appliances
638.281 Maintenance Technician Machinery Erector;	15	0.4	ည	ω .	าก	0	00	<u> </u>	0	[16.011] Industrial Technology
Service Representative; Millwright										
638.884 Maintenance Mechanic Helper	_	*	P ~	0	0	0	0	0	0	-17.1099 Construction and Maintenance Trades:
639.281 Serving Machine Repairman		*	0	_	0	0	0	0	0	
639.381 Vending Machine Repairman 639.884 Bicycle Repairman; Lawn	m 0	0.1	0 -		00	00	00	00	0 0	
Mower Kepalmman Total	82	0.8	10	10	4	1	0	2	2	
641.886 Paper Bag Press Operator;	8	0.1	0	0	0	0	0	2	0	
643.885 Bindery Worker 649.885 Bag Machine Operator	00	0.1	0 8	0 0	00	00	00	00	00	
Total	9	0.2	2	2	0	0	0	2	0	
650.582 Linotype Operator;	ო	0.1	0	0	0	_	0	0	2	[17.190] Composition; Makeup and
650.885 Typesetting Machine Tender	_	*		0	0	0	0	0	0	



J08S	STATE			REGION	ION				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals f	86 8.	Н	II	111	ΛI	>	IA	Related Instructional Program Name and O.E. Code
651.782 Cylinder Pressman; Offset	21 0.0	2 9	3	7	0	~	-	-2	F17.1902 Printing Press Uccupations
651.886 Press Man Helper 652.885 Marking-Machine Operator		0	00	00	00	00	0 -	00	
Total	27 0.8	3	3	7	1	2		4	
660.280 Cabinetmaker 661.281 Patternmaker, Wood (foundry)	7 0.2	1 2	3	-0	00	-0	00	00	-17.3601 Millwork and Cabinetmaking -17.3699 Woodworking; Other
mill)		0	0		0	0	0	0	
Total	9 0.3	3	က	2	0	1	0	0	
680.885 Card Stripper (textile)		0		0	0	0	0	0	
textiles) Cloth Tester Back Tender (te		0000	0-00	0000	0000	-000	00	0000	
Total	5 0.1	0	2	0	0	-	2	0	
690.782 Stitcher, Machine 690.885 Cutting Machine Tender 692.782 Assembly Machine Operator 692.885 Assembly Machine Tender 699.885 Cutter, Machine (any industry)		0-00-	00-00	00000	-0000	00000	00000	000-0	
- 1	5 0.1	2	-	0	-	0	0		
TOTAL: MACHINE TRADES OCCUPATIONS	8.7	83	72	27	21	31	32	18	



REGION TRAINING PROGRAM	Related Instructional III IV V VI Program Name and O.E. Code	IV V VI Program Name and O.E.		0 0 0 0 0 0 17.2399 Metalworking; Other 2 3 1 1 0 E 17.2399 Metalworking; Other	Machine	000	3 3 2 1 0	2 3 1 2 1	2 0 0 0 0 0	0 0 1 0 0	1 9 5 5 1	1 1 0 0 0	nts (2, 1 1 0 0 Watches and Clocks)	
REC	11	II		2 2	0 2	0	2 3	3	0 2	. 0	8		0	1 2	
	Cook	Cook Co.		00	0	0	_	Prints.	0	0	2		0	-	
STATE	Totals	7.9		3 ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °	2 0.1	*	12 0.3	13 0.3	2 0.1	*	1.2	4 0.1	2 0.1	0.2	
JOBS	Clusters of Occupations and D.O.T. Code	14-	BENCH WORK OCCUPATIONS	704.381 Engraver, Hand 705.884 Bench Grinder; (any industry) Polisher: Grinder	and	Precision Assembl	(any industry)	OII (ariy	Production Line; Repairman	709.887 Cleaner, Finisher (n.e.c.)	Total 41		713.381 Optician Apprentice	Total 6	



JOBS	STATE			R	REG I ON				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals	% So.	H	II	III	νī	^	۷I	Related Instructional Program Name and O.E. Code
721.281 Electric-Motor Assembler (any industry)	_	*	0		0	0	0	0	[17.040] Aircraft Maintenance
Electric-Motor Repairman 721.381 Electric-Motor and Generator Assembler Repairman	_	<u> </u>	0		0	0	0	0	
721.884 Electric Motor Assembler (electric equipment) 724.381 Adiuster, Flectrical Contacts	2 0.	 ← *	00		0	0	0	0	
Coil Winder Armature Winder;	2 0.		-0	-0-	000	0-0	00 N	00-	.
Connector-Iranstormer Assembler 722.381 Assembler (telephone and									
telegraph	c	* -	-	0	0	0	0	0	
	۸4، 00.		00	0-	2 ا	0 %	00	00	-17.0201 Electrical Appliances
Inspe	_	<u> </u>	0	0	0	0	0	0	pl7.1500 Electronics Occupations
Components Electronics	8 - 8		20	1	0-	00	00	00	
		* *	00	0 -	00	- c	000	000	
727.887 Assembler, Dry Cell and Battery 728.884 Assembler Floatsies Hiss	_	*	0		0	0	0	0	
	_	*	0	_	0	0	0	0	
Accessories II 729.887 Assembler, Electrical	2 0.1	0	_	0	0	_	0	0	
	5 0.1		2	_	_	0	0	0	
Total	46 1.4	3	13	13	5	8	က	-	

TRAINING PROGRAM	Related Instructional I Program Name and O.E. Code	0	000	0	. , , , , , , , , , , , , , , , , , , ,	0 0	2	0 0	2	0 L 17.3601 Millwork and cabinetmaking	0
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0	000	0 0	0	002	2	0000-0) <u>-</u>	00	0
	21	0	000	0 -	. ,	120	3	0000-0	, -	00	
REGION	111	0	000	0 %	, m	2 0 2	က	-0000	3 6	-0	
REG	II	0		0 0	2	000	0	000-00	> ~	0 -	
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	ე <mark>გ</mark> .	0	000			4 0 0	4	0-000-	- 2	00	0
STATE	Totals	*	* * *	* 0	0.4	0.2 0.1 0.1	0.4	* * 「 * 「	0.3	* *	0.1
S	بــ	ļ- -			16	മനഗ	16		` =		2
JOBS	Clusters of Occupations and D.O.T. Code	731.884 Toy Assembler 731.887 Assembler, Finisher, Toys-		739.687 Broomcorn Grader 739.887 Assembler Small Products (any industry)	Total	740.887 Painter, Brush; Hand (any industry) 741.884 Painter, Spray (any industry) 741.887 Painter Helper Spray	Total	750.384 Tire Inspector 750.687 Tube Inspector-Finisher 750.781 Tire Repairer 750.884 Tire Vulvanzer 750.887 Tire Mounter		762.884 Assembler (shaped wood art.) 769.887 Woodworking, Shop Hand	Total



- 11	TRAINING PROGRAM	Related Instructional Program Name and O.E. Code				F17.0303	FI/.3500 Upholstering -09.0204 Home Furnishing Equipment and Services		rl7.3399 Textile Production and	Fabrication; Other	-	-09.0204 Home Turnishings, Equipment	es nagen	417.3302 Tailoring	Fabrication; Other	- - Co.0204 Hom. Furnishings.	Equi	-17.34UI Snoe mantacturing
		ΙΛ	°		0	0			, - -		_	<u> </u>	-2	 	- 2			
		>	0	00	0	0			·	-0	0	0	0	 	0			0
		ΛI	0	00	0	0		~	0	00	_	_	0		0	~		0
	REG I ON	III	0	0-	-	0		Ö	0	00	0	0	5	-	0	2		0
	SE	H	-	00	-			ř	0	0-	0	0	0		0	0		0
	-	н	-	-0	2	0		-	0	00	0	0	0		0	0		0
		Cook	0	00	0	0	- 	0	0	00	0	0	0		0	0	·	0
	<u></u>	31s %	0.1	* *	0.1	*	*	0.1	0.1	* *	*	*	0.1		0.1	0.1		*
	STATE	Totals f	2		4	_		4		<u>, , , , , , , , , , , , , , , , , , , </u>	-	_	2		2	သ		_
	JOBS	Clusters of Occupations and D.O.T. Code	776.684 Grinding Wheel Dresser	art goods) 779.884 Concrete Pipe Maker	Total	780.381 Automobile Trimmer		780.884 Chair Upholsterer; Cushion Maker	781.484 Marker I (any industry)	781.687 Assembler (garment) 781.884 Cutter Hand II (any industry)	781.887 Cutter, Hand I (any industry)	/82.884 Sewer, Hand (any industry)	785.381 Seamstress, Tailor	786.782 Sewing Machine Operator.	Regular Equipment	/8/./82 Sewing Machine Operator all around (any industry);	Binder II	shoe)

JOBS	STATE	띧			REG	REGION				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals	31s %	Cook	—	11	111	λI	>	ΙΛ	Related Instructional Program Name and O.E. Gode
788.887 Cementer, Lacer, Brusher	m	0.1	0	0	0	-	_	-	0	rl7.3401 Shoe Manfacturing
789.884 Trimming Machine Operator 789.887 Clipper, folder		* *	00	00	00	00	00	-0	0 -	 -17.16 Fabric Maintenance Services
Total	26	0.8	0	-	3	က	7	4	8	
790.687 Cigar, Cigarette Packer 794.884 Box Maker, paperboard 794.887 Assembler, Hand (paper goods)	-2-	* *	000	0	-00	0	0	000	000	
fotal	4	0.1	0	2	,	0	_	0	0	
TOTAL: BENCH WORK OCCUPATIONS	172	4.8	15	33	38	29	27	15	15	
STRUCTURAL WORK OCCUPATIONS										
801.781 Structural Steel Worker		* *	00	0-	0 0		00	00	00	[17.1099 Construction and Maintenance Trades:Other
	- 6 F	0.2	ഹ	- 00	, – (000	· - 0	00	0 -	Metal
		k +k +	<u> </u>	000	500	000	000	00,	-00	-1/.2304 Metal Irades; compined
	-	k	5 ,	-)	5	>	-	>	
806.883 Assembly-Inspector Helper 806.884 Automobile Accessories	- ~	* 0.1	00	00	00	00	0 0	00	-0	-17.0303 Specialization; Other
Installer; Fitter-adjuster (automobile										
manuracturing) 806.887 Assembler, Automobile, Wheel 807.281 Truck Body Builder		0.1	0.0	-0	00	-0	-0	0-	00	



TRAINING PROGRAM	Related Instructional V VI Program Name and O.E. Code	VI Program Name and O.E. 2 3 -17.0301 Body and Fende 0 0 -17.0303 Specialization	2 0		7777	9	0 0 -17.1401 Industrial Electrician 1 0 -17.1403 Motor Repairman 1 1 F17.1402 Lineman		1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0
	۸۱	0	0 4	24	0000	7	0-0	00	- C)	
NOI	1111	- +-06	0 m	0	00-0	3	00-	00	00	6
REG10N	11	11 -00	о г е	440	0000	8		00	-0	0
	П	1 0-0	0	1 5	000-	7	-00	00	-0	
	C ook Co.	000 Co	0	1	0-00	∞	000	F- F-		
\TE	Totals %		*	0.3	r.* * *	1.2	* 0.0	* 0.1	0.1	0.1
STATE	Tot	10 t	36	10 26 1	%	42	- 0 E	- 8	٦.	~
JOBS	Clusters of Occupations and D.O.T. Code	Clusters of Occupations and D.O.T. Code 807.381 Automobile Body Repairman 807.884 Installer (auto parts) 809.884 Driller Hand (any industry)	Laborer, Steel	810.782 Welder, Butt; Spot 810.884 Welder, Arc 811.884 Welder, Gas	Welder, Brazer, Flame Cu	Total	820.281 Electrician, Powerhouse 820.381 Motor-Generator Assembler 821.381 Electric Meter Installer;	821.887 Groundman, Helper (light, heat, and power) 822.281 Automatic Equipment Tech.		neiper 823.281 Electrician, Radio; Public Address Systems



JOBS	STATE			REG	REG I ON				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals f	\$ S	П	II	III	١٧	>	١٨	Related Instructional Program Name and O.E. Code
824.281 Electrician (any industry) 829.887 Electrician Helper	12 0.3		9	mc	00	- 0	00	00	rl7.1002 Electricity
829.884 Elevator Repairman Helper 829.281 Electrical Repairman	; 	* *	-00	000	000	0 -	000	000	[17.1099 Construction and Maintenance Trades.Other
	2 0.1		0	0	-	-0	0	0	
	-	*	0	***			0	0	-17.0200 Appliance Repair
	2 0.1	2	0 0	60	700	00	00	00	_
829.381 Cable Splicer; Equipment Installer	2 0.1		0	0	_		0	0	Electronic Industrial Lineman
Total	43 1.	3 13	12	. 4	က	9	3	2	
	6 0.2		ç ç	0	00	2	ا 0	00	F ^{17.} 1005 Painting and Decorating
	2 - 2	0	000	00-	-00	000	000	000	L [17.1099 Construction and [Maintenance Trades; Other
845.781 Painter, Aircraft, Automobile 841.884 Billposter (business service)		۰۰	00	-0	00	00	00	0	rvices
Total	13 0.4	3	2	3	-	2	_	-	
850.883 Power Shovel Operator 850.887 Laborer, Road 851.884 Pipe Layer (construction)		000	000	0	000	-00	000	000	-17.1003 Heavy Equipment Construction -17.1007 Plumbing and Pipefitting



JOBS	STATE			RE	REGION				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals f	Cook	I	11	III	١٧	۸	١٨	Related Instructional Program Name and O.E. Code
	*	0	0	0	0	0	0	-	1
	2 0.1 2 0.1	00	-0	00		0-	00	00	17.1099 Construction and Maintenance Trades;
853.883 Asphalt Paving Machine Operator 859.883 Heavy Equipment Operator 859.884 Duct Layer (construction)	2 0.1	0-0	-00	000	000	00-	00-	000	Other
Total	12 0.3	1	က		2	3	1	1	
860.137 Carpenter-Labor Foreman 860.381 Carpenter (construction)	1 * 49 1.4	0	00	0	0	1	0	0 4	[17.1001 Carpentry
	3 0.1	000	· - c	N C	- 0 0	0 -	00	000	12 1000
) - C	70r	000	000	000		000	000	
Stonemason Helper Stonemason Helper 862.381 Plumber: Pipefitter: Steam) ₋	. m	5 ~	- ~) -) ₋	
Serviceman; Aircraft Mechanic-Plumbing			•	· -	ı	ı	•	•	
862.884 Plumber Helper; Pipefitter	17 0.5	4	ત		7	0	2	ო	
862.887 Laborer, Plumbing	*	0	_	0	0	0	0	0	
863.884 Insulation Worker	5 0.1		0	8	2	0	0	0	-17.1099 Construction and Maintenance Trades:
	* 1	ō	0	0	0		0	0	
869.281 Furnace Installer; Repairman			0	5 6	50	00	-	-0	- -17.1020 Heating



JOBS	ST	STATE			RE	REGION				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Tot	Totals F %	Cook Co.	,	II	III	١٧	^	I۸	Related Instructional Program Name and O.E. Code
869.884 Fence Erector; Formsetter; Construction Worker;	13	0.4	-	2	2	_	4	-	2	F17.1099 Construction and Maintenance Trades;
(petroleum) 869.887 Laborer; Hod Carrier; Trackman	ო	0.1	,	0	0			0	0	Other L17.1007 Plumbing and Pipefitting -17.1099 Construction and Maintenance Trades; Other
Total	112	3.4	28	16	16	6	17	14	12	
891.138 Maintenance Foreman 891.884 Building Cleaner, Sandblaster 899.281 Maintenance Man, Factory 899.381 Maintenance Man, Building 899.884 Maintenance Man Helper	42010	0 000 2 * 2 L 2	00-00	00000	0-0	00-00	000	00-8-	20-02	[17.1099 Construction and Maintenance Trades; Other
Highway Maintenance Man Total	25	0.7	-	9	m	m	~	'n	rc.	
TOTAL: STRUCTURAL WORK OCCUPATIONS	283	7.9	99	51	88	24	41	34	59	
MISCELLANEOUS OCCUPATIONS										
905.883 Truck Driver; Heavy 905.887 Driver Helper 906.883 Truck Driver, Light; Food	35.2.4	0.1	0-9	-06	0-4	000	102	006	0 0	
909.137 Truck Foreman 909.883 Garbage Collector 909.887 Furniture Mover	- 82	0.1	0-0	020	0-0	000	00-	-00	00-	
Total	47	1.4	8	=	9	3	4	7	8	



11 4		•					•
TRAINING PROGRAM	Related Instructional Program Name and O.E. Code		-17.0801 Seamanship F17.0403 Ground Operations E04.1900 Transportation		0300	C04.0300 Automotive F04.1900 Transportation L14.0505 Traffic, Rate, and Transportation Clerks	-04.0800 General Merchandise
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	Cook Co.	0-0	0-0 -	080	6000	_	0 4
STATE	Totals %	-***	0.1	* [.0	8.000	0.1	1.9
STA	Tot	2	2 5 2 2	-2 2	92 4 -	~	2 1 63
J0BS	Clusters of Occupations and D.O.T. Code	910.383 Locomotive Engineer, Fireman 910.388 Yard Clerk 910.687 Track Repairman 910.782 Car Inspector 910.883 Laborer, Car Barn; Yard	910.884 Brakeman, Yard 910.887 Baggageman 911.887 Wharfman 912.368 Transportation Agent (air transportation)			919.368 Ticket Agent	919.883 Deliveryman 919.887 Automobile Washer; Cleaner Total



TRAINING PROGRAM	Related Instructional Program Name and O.E. Code	-04.2000 Retail Trade; Other -04.0900 Hardware, Building Materials, Farm and Garden Equipment and Supplies	
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REC	II	00 00 0 0 000	c 4
	H	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	n %
	Cook Co.	00 04 0 - 00-4	22
TATE	als %	* 0 000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
STATE	Totals	18 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	75
JOBS	Clusters of Occupations and D.O.T. Code	920.132 Packaging Foreman 920.885 Packager, Machine 920.885 Packager, Machine 920.887 Packager, Hand 921.883 Conveyor Operator Electric Crane Operator Electric Crane Operator Electric Crane Operator Electric Crane Operator Pardman, Used Building Materials Truck Operator Fork-Lift Operator Fork-Lift Operator Fork-Lift Operator Fork-Lift Operator (any industry) 922.887 Loader; Car Filler; Lumber Yard Man; Returned Goods Sorter; Laborer, Stores (any industry) 929.137 General Handling Foreman 929.782 Conveyor Line Operator, Automatic Automatic Operator, Automatic	



J 0B S	STATE			R	REG I ON				TRAINING PROGRAM
Clusters of Occupations and D.O.T. Code	Totals	S COO K	0. 0. 1	II	III	ΛI	>	١٨	Related Instructional Program Name and O.E. Code
930.782 Driller, Machine (any industry) 930.884 Driller, Hand 939.281 Miner (mining and quarrying)	2-2	0.1	000	-00	000	000	00-		
Total	5	0.1	0] 0	0 0	O	1	3	
950.885 Air Compressor Operator	ო	0.1	0	2 0	1	0	0	0	
951.885 Fireman; Boiler Tender 952.387 Powerhouse Runner 955.782 Sewage Plant Operator		* * *	000	000	000	000	-00	000	
957.282 Control Room Technician	, p	*					0	, 0	-16.0108 Electronic Technology
959.168 Dispatcher, Service 959.884 Line and Frame Poleman	<u>–</u> ო	* [.0	00	0-	00	00	0 -	00	
lree Irimmer (electricity, heat, and power), (telephone and telegraph)				<u></u>					
Total	=	0.3	0	5	-	0	2	0	
%60.382 Motion Picture Projectionist 961.868 Model, Photographers 962.884 Film Room Worker (TV)		* * *	000	000	000	-00	00-	000	
Total	3	0.1	0	0	0	1		0	
970.381 Letterer; Sign Painter; Retoucher (printing and	2		-0		o 	0	0	0	F17.1904 Photoengraving
publishing)				-			•		



J0BS	STATE				REG	REGION				TRAINING PROGRAM
Clusters of Occupations	Totals		Cook							Related Instructional
and D.O.T. Code	f	9-6	ვ	-	11	III	١٧	>	٧I	Program Name and O.E. Code
970.884 Colorer (printing and										
publishing)	_	*	_	0	0	0	0	0	0	
		*	0	0		0	0	0	0	_
972.381 Transferer, Hand (printing	(- ((-17.1903 Lithography, Photography
	2	0.1 		0	0	0	_	0	0	
979.381 Negative Process Operator;	2	0.1		0	_	0	0	0	0	-17.1905 Silk Screen Making and
rint-snop rnotographer					_					
										EI/.U9UI Protographic Laboratory
072 201 Composition: Joh Dwintow	и	-	_			-	·		•	(
373.301 compositions, too reflicer	n 		_	-	-	5	7	5	5	-17.1901 COMPOSITION, Makeup, and Tynesetting
976.381 Developer; Enlarger	<u>, </u>	*	0	0		0	0	0	0	-17.0901 Photographic Laboratory
976.884 Film Cutter; Splicer	_	*	0	0	0	_	0	0	0	
976.887 Photographer Helper	_	*	_	ဝ	0	0	0	0	0	
977.884 Bookbinder; Repairer	<u>-</u>	*	0	0	0	0	0	_	0	
979.782 Engraver, Machine Operator	-	*	0	0	ō	0	0	_	0	-17.1903 Lithography, Photography
Blueprint Machine Uperator			-		•	,	•	•	•	
979.886 Print-Shop Helper	2		_ 7	_	0	0	0	0	0	
9/9.88/ Photolith Operator	_	*	0		0	0	0	0	0	-17.1903 Lithography, Photography,
Total	12	9.0	او	4	2	-	3	2	0	
TOTAL: MISCELLANEOUS OCCUPATIONS	247	6.9	20	69	37	15	21	33	22	
					1					



APPENDIX B PROCEDURES FOR ASSIGNING THE RELATEDNESS CODE

PROCEDURES FOR ASSIGNING THE RELATEDNESS CODE

- Utilizing information provided by the employed respondent in questions
 11--Job title, 13--Type of business and 14--Job duties, assign the D.O.T.
 Code number that identifies the respondent's job.
- 2. The attached instrument matches jobs by D.O.T. Code to related instructional programs by O.E. Code. Locate the D.O.T. Code number assigned to the respondent's job on the relatedness instrument. Compare the related O.E. Code number(s) to the O.E. Code number of the respondent's occupational training program which is on the identification label on page one of the survey instrument.
- 3. If all six digits of the related O.E. Code and the respondent's O.E. Code match exactly, assign the number 3 to indicate a "closely related" occupation.
- 4. If the first four digits of the related O.E. Code (the shaded area) and the respondent's O.E. Code match exactly but the fifth and sixth digits do not, assign the number 2 to indicate a "related" occupation.
- 5. If there is not an exact match between the first four digits of the two O.E. Code numbers, assign the number 1 to indicate a "non-related" occupation.
- 6. In cases where respondents have broad 0.E. Codes that do not have related occupations specified, e.g., 18.9900, 01.0000, 04.0000, 07.0000, 09.0000, 14.0000, or 17.0000, refer to question 18 to see if the respondent checked a reason for employment in a job not related to their occupational training. If the respondent checked a reason for non-training-related employment, assign the number 1 to indicate a "non-related" occupation.



If the respondent did not check a reason in question 18, the relatedness of the program taken to employment is "not measurable". Assign the number 0 when relatedness cannot be determined.

SAMPLE

D.O.T.	0.E.	D.O.T.	0.E.	D.O.T.	0.E.
001.281	- 17.1300	017.281	- 17.1300	078.281	- 07.0201
002.280 002.281	- 16.0101 - 16.0101 17.1300	019.181 019.281	- 16.0104 - 16.0109 16.0113 16.0499	078.368	07.0203 07.0204 - 07.0102 07.0403 07.0404
003.168	- 16.0107 16.0108 16.0112	019.288	17.1300		07.0501 07.0901 07.0902
003.181	- 16.0107		16.0499	078.381	- 07.0202 07.0203

If the six digits of the respondent's O.E. Code match the corresponding six digits of the instructional program related to the D.O.T. Code of the respondent's job, assign the number 3 for a "closely related" occupation.

If the first four digits of the two codes match exactly, assign the number 2 for a "related" occupation.



	D.O.T.	0.E.	D.O.T.	0.E.
\mathbf{O}	017.281 -	17.1300	078.281 -	02.6201 02.0203
D.O.T. O.E.	019.181 - 019.281 -	04	078.368 -	07.0204
001.281 - 17.1300	013,201 -	13 15 99	0,0,00	07.0403 07.0404
002.280 - 16.0101 002.281 - 16.0101	019,288 -	7.1300 16.0106		07.0501 07.0901
17.1300	017,200	16.0110 16.0199	078.381 -	07.09 02
003.168 - 16.0107 16.0108	020,168 -		-	07.9203 07.0503
16.0112 003.181 - 16.0107	020.188 -		078.687 -	07,0203
16.01 08 16.01 12		16.0117	079 .35 8 -	07.0401 07.0903
003.281 - 16.0112 17.1300	022,181 -	16,9105 16,0699	079.378 -	07.0904 07.0101
005.281 - 16.0106	022,281 -	16,0105 16,0203		07.03 02 07.03 05
17.1300	022.384 -			07.0306 07.0602
007.081 - 16.0113 16.0199	024.288 - 024.381 -	000000000000000000000000000000000000000	096.128 =	91.5200
007.181 - 16.0113 17.1300	025.288 -		1	
007.187 - 16.0113	000 000	16,0699	132.088	04.0100
007.281 - 17.1300	029,280 - 029,281 -	16.0105	141.031 - 141.051 -	17.0700 17.0700
008.380 - 15.0105	029.381 -	16,0113 - 16,0113 - 15,0203	141.081 -	04,0100
010.281 - 16.0113 16.0116		16,0599	141.168 -	17.0700 04.0100
17.1300 010.288 - 16.0116	040.081 - 040.381 -		142.031 - 142.051 -	C4.0100
011.288 - 16.0114	041.168		142.061 -	17.0702
011.381 - 16.0140 012.168 - 14.0204	049.384		142.081 -	
012.188 - 16.0111 16.0602	050.088 -			17.0703
012.281 - 16.0110 012.288 - 16.0111	073.108	- 01,0401	143.062 - 143.858 -	
014.188 - 17.1300	073.181 · 073.381 ·	- 01.0401 - 01.0299		04.1800
014.281 - 17.1300	075.378	- 07.03 01	144.081 -	17.6700
015.181 - 16.0115 015.380 - 16.0115				



		p.o.T. 0.E.
D.O.T. 0.E.	D.O.T. 0.E.	[.U.T. U.L.
149.031 - 17.0701	169.118 - 14.0699	187.168 - 01.02 00
149.281 - 16.0103	169.168 - 01.0602	04,0300
17,0703	04.1300	04.0900
1140,00	14,0200	04.1000
160,288 - 14,0101	14.0701	04.1100
	14.0802	04.1500
161.118 ~ 14.08 02	14,0805	04.1700
161.268 - 14.0804	14.0899	04.1800
	169.188 - 04.1300	09.0203
162.118 - 14.0899	169.268 - 04.1300	09.0205
162.158 - 01.0401	14,0899	17 .29 00
04.010 0	169.388 - 14.0899	187.288 - 04.03 00
04.0800		
04.9 900	180.118 - 01.010 0	188.168 - 01.04 01
14.0899	180.168 - 01.01 00	
162.168 - 01.0401	91.0200	189 . 118 - 04.12 00
14.0899	01_06 00	189.158 04.17 00
162.188 - 14.0899		189.168 - 04.08 00
162.288 - 14.0899	181 . 118 - 😘 1600	189.268 - 04.1200
162 110 64 1200		
163.118 - 04.1 200 04.1 400	183.118 - 04.12 00	191.118 - 04.1600
163.158 - 04.03 00	17.1999	04.1700
163.168 - 04.1200	183.168 - 01.07 03	04.1800
09.0203	184.118 - 04.1400	191.168 - 04.0300
UJ. 02.02	04.1700	04.1800 191.268 - 04.0400
164.068 - 04.0100	04.1900	04.2300
164.118 - 04.0100	184.168 - 04.19 00	191.287 - 04.1000
164.168 - 04.0100	1071100 - 071,300	04.1700
	185.158 - 04.02 00	
165.068 - 04.01 00	04,0800	193.168 - 17.0403
165.168 - 04.1 800	185.168 - 04.0300	
	04.0700	195.168 -04.18 00
165.088 - 14.0502	04.0800	
166.118 - 14.0601	04,1600	196.283 - 16.06 01
14:0603	04.1700	
166.168 - 04.1300	04.3100	197 . 130 - 17.98 02
14.0603 166.228 - 14.0601	105 110 54 550	197.133 - 17.08 02
04.1900	186.118 - 04.040 0	100 100 47 6700
166.268 - 14.0602	04.1300	199.187 - 07.0702
166.168 - 14.0899	04.1400	199.281 - 09.0203
17,2899	04.1600 04.7700	199.381 - 17.2002
	186.138 - 14.0899	199.885 - 17.2099
168.187 - 17.2899	186,168 - 04,0400	a
168.268 - 04.1300	04,1300	
168.284 - 01.0401	04,1600	201.268 - 14.0303
17,2899	14,0805	14.0702
168.287 - 01.0401	14.0899	201.368 - 14.0303
04,1600	186.388 - 14.08 05	14.0702
07.07 03		
07.0909	187.118 04.1 100	
16.02 00	187.138 _ 09.02 05	

168,288 - 14.0502

					D A T	0.5
D.O.T.	0.E.	D.O.T.	0.E.	•	D.O.T.	0.E.
202.368 -	14.0703	208.885 -			213.138 -	
			14.0702		213.382 -	
203.138 -	14.0903 14.0902	209.138 -	14 0999		213,582 -	202
203.582 -			14.0702		213.588 -	200 200 200 200 200
•	14.0902	209.368 -	20000000000000000		213.782 -	14.22 02
203.588 -	14.0703 14.0902	209.388 -	14.0702		213.885 -	14.0202
	14,0302	203.300 -	14.0702		214,488 -	14,0104
204.268 -			14.0901			
204 200	14,0402	209.488 -	14.0399 14.0702		215.388 -	
204.288 -	14.0702	209.584 -			285.488 -	14,0104
		-	14,0702		216.388 -	14.0104
205.138 -		209.587 -			216.488 -	G4.0 700
205.168 -	14.0703 14.0503	209.588 -	14.0702 04.0800		216.588 -	14.0104
	14.0303	2031000 -	14,0399		210.500	1480104
205.288 -	14,06 03		14.0502		217.388 -	
	14.0703	209.687 -	14.0901		217.885 -	14.0104
205.388 -	14.0703	209.688 -			219.138 -	14.0199
		· •	14,0502		219.368 -	04.0400
206.388 -		210.368 -	14.6102		010 000	14.0199
206.588 -	14.03 02 1 4.03 02	210.388 -			219.388 -	14.0303
	14,0702	210.488 -	14,0102			1 7.19 99
007.700	14 0001	210.588 -			219.485 -	
207.138 -	14.0702	211,138 -	14.0103	•	219.487 - 219.488 -	
207.582 -		211.368 -	14,0103		2134400 -	14.0303
	14.0702	211.468 -				14.0602
207,782 -	14.030 14.0702		04.0800 04.1100		219.585 - 219.588 -	
	14.0302		04.1800		219.688 -	
	14.0702		04.1900	•		
207.885 -	1 4.03 01 1 4.07 02	211.488 -	14.0103 14.0103		221.138 -	
Ŷ	14.0702	211,400	1410103		221.168 - 221.388 -	
	14,0399	212.138 -			221.588 -	
	14.0702	212.358 -	14.0105	-	200 100	14.4500
	14,0399 14,0702				222.138 - 222.368 -	
208.782 -					222.387	
•	14.0702				222.488 -	14.0503
					222.587 - 222.588 -	
					222.587 -	
						14.0503
						-



		W 124.1
D.O.T. O.E.	D.O.T. 0.E.	D.O.T. 0.E.
223 . 138 - 14.05 04	236.382 - 14.0401	249.387 - 14.9900
223.388 - 14.05 04	236.588 - 14.0401	
	230.000 = [M.DAU]	249.388 - 04.1700
223.487 - 04.0600	0.07 7.00 04 3000	14.0499
14.0504	237.168 - 04.1800	14.9900
223.587 - 14.05 04	14.0303	249.488 - 14.99 00
223.588 - 14.0504	14.07 03	249.587 - 14.99 00
223.687 - 04.0200	237 . 368 - 14.0 406	1 6.01 06
14.05 04	04.1900	249.588 - 14.99 00
223.887 - 07.09 05	· · · · · · · · · · · · · · · · · · ·	249.688 - 14.04 99
	239.138 - 14.04 99	14.9900
224.487 - 14.0 599	239.228 - 14.0499	249.887 - 14.99 00
	239.368 - 04.1300	
229.138 - 14.05 99	14.0499	250.258 - 04.1300
229.188 - 14.0599	239.382 - 14.0499	250.358 - 04.1700
229.368 - 14.0599	239.388 - 14.0499	250,550 - 04,1100
229.387 - 14.0599	239.587 - 14.0499	251.258 - 04.0400
229.388 - 14.0599	239.588 - 14.0499	231.230 - 04.8400
		050 350 04 3000
229.488 - 14.05 99	239.687 - 14.0499	252.158 - 04.12 00
229.5 87 - 14.0 599		252.258 - 04.0100
229.588 - 14.0502	240.138 - 14.99 00	04.0400
14.0599	240.368 - 04.0800	252.358 - 04.0 100
229 . 688 - 14. 0599	14.9900	04.0400
229.884 - 14.05 02	240.388 - 14.99 00	04.1200
229.887 - 14.05 99	240.468 - 14.99 00	
	240.884 - 14.99 00	253.358 - 04.01 00
230.138 - 14.0405	240.887 - 14.9900	04.9900
230.368 - 14.0405		0.170.500
230.868 - 14.0405	241.168 - 04.13 00	254.258 - 04.1100
230.878 - 14.0405	241.368 - 04.0800	234,230 - 04,1100
2501070 1710400	14.9900	255.258 - 04.1900
231.138 - 14.0403	241.387 - 14.9900	255.250 - 04.1900
231.388 - 14.0403	241.387 - 14.5300	256 (250 04 7000
231.588 - 14.0403	242.368 - 04.1100	256,258 - 04,1000
	242.300 - 84.1100	256.358 - 04.070 0
231.687 - 14.0403	ary water.	
231.688 - 14.0403	243.368 - 14.99 00	257.358 - 04.99 00
000 700 34 0400	243.468 - 04.0800	
232.138 - 14.0403		258.258 - 04.0 100
232.368 - 14.0403	249.138 - 14.0499	258 . 358 - 04.0 100
	14.9900	04.1200
233.138 - 14.0403	249.168 - 04.1300	
233.388 - 14.0403	14.0499	259.358 - 04.12 00
	249.288 - 16.0106	04.99 00
234.582 - 14.0404	249.368 - 04.0100	259 . 458 - 04.19 00
234.885 - 14.0404	04.0400	
207,000 - 17,0707		260.458 - 04.05 00
235.138 - 14.0401	04.0800	
	04.0900	261.158 - 04.0600
235.228 - 14.0401	04.9900	261.138 - 04.06 00
235.388 - 14.0401	14.9900	
235.585 - 14.0401	14.0499	261.358 - 01.0402
235.588 - 14.0401	14.0602	
235.862 - 14.0401		



D.O.T. O.E.	. D.O.T. O.E.	D.O.T. O.E.
262.358 - 01.02 02	281.158 - 04.12 00 - 281.358 - 04.02 00	293.358 - 04.18 00 04.20 00
263.358 - 04.02 00 04.08 00	04.07 00	294,258 - 04,0800
263.358 - 04.020 0	04.12 00 281.458 - 04.1290	294,238 - 04,0800
04,0800		296.358 - 54.0800
04.1200	282.258 - 04.1200	296.368 - 04.03 00
04,3100	282 . 358 - 04.02 00	296.388 - 04.08 00
263 . 458 - 04.02 00	04,1200	
04.08 00	000 450	297.258 - 09.02 03
264.358 - 04.0200	283.458 - 04.0800	297 . 458 - 04.08 00
2011000 - 0110200	284,258 - 04,1200	298.081 - 04.0 100
265.358 - 04.12 00	284.358 - 04.120 0	298.381 - 04.0100
	- 04.1800	17.0702
266.258 - 04.08 00		. 298.884 - 94.9100
04.1200	285.358 - 04.0800	
267.358 - 04.3100	286.358 - 04.1800	299.138 - 6.100
207.336 - 04.3100	200.338 - 074.1500	4.36 00
268.358 - 04.1200	287.358 - 04.1800	04.75 00
	287.358 - 04.18 00	299.258 - 09.0203
270.258 - 04.1200		299.358 - 04.08 00
	- 289,158 - 04,12 00	04,2000
271.358 - 04.120 0	289.358 - 04.03 00	299.381 - 17.10 99
	· 04,05 00	299.387 - 04.02 00
273.258 - 04.1200	04.1200	04.03 00 299.468 - 04.060 0
274.358 - 84.0800	04.1800	299.478 - 07.06 01
04.1000	04.20 00	299.488 - 04.1000
275.358 - 04.0700	04.3100 289.458 - 04.080 0	299.587 - 04.06 00
273:338 - 04:0100	289 .4 58 - 04.080 0	299.687 - 04.10 00
276.158 - 04.1200	290.358 - 05.0900	299.884 - 07.06 01
276.358 - 04.0200	290.468 - 04.06 00	299.887 - 04.0100
04,0900	04.0800	04.0200
04.1200	04.1500	
04,1600	290 . 478 - 04.08 00	3
04.1900	290.877 - 04.06 00	
277 251 63 6361	203 350 68 0500	301. 887 - 09.02 05
277.251 - 01.03 01 277.358 - 04.09 00	291.158 - 04.06 00 291.858 - 04.06 00	302.887 - 09.0202
277.336 - 04.0300	291.000 - 04.0000	302.007 - 03,0202
278.258 - 04.10 00	292,138 - 04,0600	303.138 - 09.020 5
04,1200	292,358 - 04,06 00	
09.02 04	64,1500	305.281 - 09.02 03
278.358 - 94.1000	292 . 468 - 04.07 00	
000 000 04 4000	292.483 - 04.0700	306.878 - 09.02 05
280.258 - 04.1900	292.887 - 04.0600	307.878 - 09.0201
280.358 - 44.03 00 04.19 00		30/40/0 - U34U2 U1
280.458 - 04.0300		309.878 - 09.0201
POST INC - CONTRACTO		09.0202



D.O.T. O.E.	B.O.T. O.E.	D.O.T. 0.E.
310.137 - 04.0700	319.138 - 09.02 03	351.878 - 94.19 00
310.138 - 04.0700	17.2900	
09.0203	319.468 - 17.2904	352 . 168 - 04.18 00
310.868 - 04.0700	319.874 - 09.02 03	352.878 - 04.110 0
	319.878 - 17.2904	04.1900
311.138 - 09.02 03	319.884 - 17.2902	
17.2904		353.368 - 04.0100
311.878 - 09.0203	320.137 - 04.1700	
17,2904	320.138 - 09.0205	354.878 - 07.03 02
		07.03 07
313.131 - 17.29 02	321.138 - 09.02 05	07,09 07
313.138 - 09.02 03		
17.2901	323.887 - 09.02 05	355.878 - 07.03 03
313.168 - 17.29 02		07.0304
313.381 - 09.02 03	324. 13 8 - 04.990 0	07.0402
17,29 01	324.878 - 04.1100	07.0907
17.2902		09,0201
313.78 1 - 09.02 03	329. 138 - 04.1 100	
1 7.29 01	329.478 - 04. 1100	356.138 - 01.990 0
1 7,29 02	329.878 - 04.320 0	356.381 - 01.0299
313.884 - 09.02 03	329 . 999 - 04.1 100	356.874 - 01.029 9
17,29 01		01.99 00
	330.371 - 17.26 01	
314.381 - 0 9 .0203		358.878 - 04.1100
1 7,29 02	331 . 878 - 17.26 02	04.1900
314.781 - 09.32 03		358.887 - 17.110 0
. 1 7,29 02	332.138 - 17.26 02	270 270 87 270
314.878 - 09.82 03	332.271 - 17.26 02	359.878 - 09.02 01
1 7-29 02 .	332.381 - 17.2 602	267 120 17 1502
	222 271 37 702	361.138 - 17.18 02
315.381 - 01.4203	333.271 - 17.2602	361.448 - 17.1602
1 7.29 02	334.868 - 17,2699	361.587 - 17.16 02 361.687 - 17.16 02
	334.878 - 17.26 99	361.782 - 17.16 02
316.781 - 09.0203	334.070 - 17,2033	361.884 - 17.18 02
17,2903	335.878 - 17.2699	361.885 - 17.1602
316.878 - 09.0203		361.886 - 17.1602
17.2802	338.381 - 07.09 09	361.887 - 17.1602
316.884 - 09.0203 17.2903		
IVA ZEUS	339.371 - 17.2601	362.137 - 17116 01
317.884 - 09.0203	17,2699	362.381 - 17.16 01
17.2902	3 39. 381 - 07.09 09	362.782 - 17.18 01
317.887 - 03.0203	3 39. 878 - 1 7.26 99	362.884 - 17.16 01
17.2902		362.886 - 17.16 01
	340.3 68 - 04.18 00	362.887 - 17,16 01
318.138 - 09.0203		
17.2599	341.368 - 04.18 00	363.781 - 17.16 01
**************************************		363.782 - 17.16 01
	346.381 - 09. 02 02	363.884 - 17.1601
	346. 878 - 09.020 2	17,1602
		363.885 - 17.1602
	350.138 - 1 7.290 4	363.886 - 17.1602
	350.878 - 17.29 04	363.887 - 17.1602



D.O.T.	0.E.		D.G.T.	0.E.
364.381 - 364.781 - 364.884 - 364.887 -	17.1699 17.1699		381.137 381.887	- 17.1300 - 17.1300
365.381 - 365.884 -	17.3402	•	389.138 389.887	- 0,0201 - 1,000
369.468 - 369.587 -	17.1601 04.1500 17.1601 17.1600 17.1601 17.1699			
060 004	17.1601 17.1602 16.1699 17.1601 17.1602			
369.886 - 369.887 -	17, 1609 17, 1602 17, 1602			
373.118 - 373.168 - 373.884 -	17.2803			
375.118 - 375.138 - 375.168 - 375.228 - 375.268 - 375.388 - 375.588 - 375.868 -	17.2802 17.2802 17.2802 17.2802 17.2802 17.2802			
376.268 - 376.868 -	47.74			
377.868 -				
379.168 - 379.268 - 379.368 - 379.384 - 379.387 - 379.887 -	01.0602 17.2602 17.2602 17.2602 17.2601 17.2601	_		



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D.O.T. 0.E.	D.O.T. O.E.	D.O.T. 0.E.
401.137 01.0102	411.181 - 01.0101	436.181 - 01.0607
401.138 - 01.0102	411.884 - 01.0101	436.884 - 01.0607
401.181 - 01.0102		436.887 - 01.06 07
	412.137 - 01.0401	420 607 17 0000
402.181 - 01.0102	412.168 - 07.0401	439.687 - 17.0800
402.883 - 01.0102	412.387 - 01.0299	439.884 - 17.0800
403.137 - 01.0102	412.687 - 01.0299 412.884 - 01.0299	441.128 - 01.0601
403.181 - 01.0102	412.887 - 01.0299	441.137 - 01.0601
403.687 - 01.0401	4121007 - 0110233	441.168 - 01.0601
403.883 - 01.0102	413.684 - 01.0401	441.384 - 01.0601
403.886 - 01.0102	413.687 - 01.0402	441.687 - 01.0601
		441.887 - 01.0601
404.131 - 01.0102	419.131 - 01.0101	441.137 - 01.07 06
404.137 - 01.0102	419.181 - 01.0101	440 120 03 0706
404.181 - 01.0102	419.884 - 01.9900	442.138 - 01.070 6 442.168 - 01.070 6
01.0401	421.181 - 01.0100	442,100 - 01,0700
404.883 - 01.0102	421.181 - 01.01 00 421.384 - 01.02 00	449.168 - 01.0703
404.884 - 01.0299 404.885 - 01.0301	421.883 - 01.0100	449.287 - 01.0703
404.887 - 01.0102	421.884 - 01.0100	449.887 - 01.0703
405.181 - 01.0102	422.137 - 01.0304	451.181 - 01.0604
405.885 - 01.0102	422.181 - 01.0304	451.781 - 01.0604
405.887 - 01.0102	422.884 - 01.0304	452.868 - 01.0602
406.168 - 01.0505	422.887 - 01.0304	452.000 - 01.0002
406.181 - 01.0303	424.132 - 01.0301	465.137 - 01.0201
406.884 - 01.0505	424.883 - 01.0301	465.381 - 01.0201
406.887 - 01.0505	424.886 - 01.0301	465.781 - 01.0201
N		465.884 - 01.0201
407.137 - 01.0505	429.131 - 01.0100	465.887 - 01.0102
407.138 - 01.0505	429.228 - 01.0299	
407.181 - 01.0504	429.885 - 01.0302	466.887 - 01.0401
407.868 - 07.0602	429 887 - 01.9900	A67 120 AV 0200
407.884 - 01.0504	421 702 - 17 0000	467.138 - 01.0299 467.384 - 01.0299
407.887 - 01.0602	431.782 - 17.0800 431.883 - 17.0800	407.304 - 41.0299
409.137 - 01.0192	431.884 - 17.0800	469.158 - 01.0200
409.168 - 01.0104	431.887 - 17.0800	469.168 - 01.0202
409.181 - 01.0104		469.381 - 01.0401
01.0500	432.884 - 17.0800	469.387 - 01.0402
01.0301		
409.884 - 01.0501	433.884 - 17.0800	
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	D.O.T. 0.E.	D.O.T. O.E.
5		553.884 - 17.2700
5	520.381 - 01.04 01	
0.07	520.782 - 17.29 01	556.780 - 17.27 00
D.O.T. O.E.	520.884 - 17.290 1	556.782 - 17.27 00
FOO 303 - ## ####	520.885 - 01.020 2	556.885 - 17.27 00
500.131 - 17.2399	520.886 - 01.02 02	556.886 - 17.27 00
500.380 - 17.2399	501 100 01 0401	
500.782 - 17.2399	521.138 - 01.0401	557.782 - 17.27 00
500.884 - 17.2399	521.885 - 01.0202	
500.885 - 17.2399 500.886 - 17.2399	521.886 - 01.0202	558.280 - 16.010 5
	522.782 - 01.0401	*******
501.782 - 17.23 99	522.884 - 01.0401	559.782 - 3.2099
501.885 - 17.23 99	522.885 - 01.04 01	559.885 - 12.200
502 . 381 - 17.23 01	523.137 - 01.04 01	575 . 782 - 17,27 00
502.782 - 17.2400	523.782 - 01.0401	
502.884 - 17.2301	523.885 - 01.0401	580.782 - 17.33 99
502.887 - 17,2301		580.884 - 17.3399
302 6067	524.381 - 17.2901	580.885 - 17.33 99
504.131 - 17.2400	524.782 - 17.29 01	
504.281 - 17.2400	524.884 - 17.29 01	581.782 - 17.3399
504.380 - 17.2400		581.885 - 17.16 02
504.387 - 17.2400	525.381 - 01.0401	17.3399
504.782 - 17.24 00	525.387 - 01.0401	
	525.884 - 17.08 00	582.782 - 17.3399
505.782 - 17.23 99		582.884 - 17.26 01
505.884 - 17.2399	526.381 17.29 01	582.885 - 17.3399
505.885 - 17.2399	526.781 - 17.29 01	
	526.782 - 17.29 01	583 . 132 - 17.33 99
512.687 - 17.23 01	17,29 99	583 . 137 - 17.33 99
512.782 - 17.23 01	526.885 - 17.29 01	583 . 782 - 17.3399
512.883 - 17.23 01	526.886 - 17.29 01	583 . 884 - 17.33 99
512.885 - 17.2301		583 . 885 - 17.33 99
512.886 - 17.23 01	529.138 - 01.02 02	583.886 - 17.33 99
	529.381 - 01.04 01	583 . 887 - 17.3399
514.380 - 17.2301	529.387 - 01.04 01	-
514.782 - 17.2301	529.685 - 17.20 02	584 . 885 - 17.33 99
514.884 - 17,2301	529.687 - 01.04 01	
514.885 - 17.2301	529.782 - 01.04 01	585 . 885 - 17.33 99
	529.886 - 01.0401	
5 18. 381 - 17.23 01	5 29.887 - 01.04 01	586.782 - 17.3399
518 . 687 - 17.23 01		586.885 - 17.33 99
518 . 887 - 17.23 01	530.281 - 16.01 05	
		587.384 - 17.33 99
519.387 - 16.06 99	539.384 - 16.0105	587.782 - 17.339 9
519.884 - 17.23 01	539.387 - 16.0100	587.885 - 17.339 9
5 19.887 - 17.23 01	540.000 95.0736	587.886 - 17.3399
	542.280 - 16.01 16	
		589.687 - 17.00 00
		589.885 - 17.16 01
		17.3399
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		590.887 - 17.2700



_	D.O.T.	0.E.	D.O.T.	0.E.
6	609.381 -	17,2399	619,280	- 17,2304
J	609.782 -			- 17,2304
D.O.T. O.E.	003.702 -			- 17.2303
	COO 00F	17.2 4 00	019.300	
COO 101 17 0000	609.885 -	17,2302		17,2304
600.131 - 17.2302				17,2305
600.280 - 17.2302	610.381 -		619.381	- 17.2400
600.281 - 17.23 02	610.782 -	17.2399	619.384	- 17,2400
600.380 - 17.23 02	610.884 -	17.2399	619.387	- 17.2400
600.381 - 17.04 01				- 17,2304
600.884 - 17.2302	C11 700	37 4000	0.00.00	17.2305
	611.782 -			17.2399
601 . 130 - 17.23 07	611.885 -	17,2399	610 004	
				- 17.2304
601.280 - 17.2307	612,131 -	17.2399	619.885	- 17.2304
17.2308	612.281 -			
601 . 281 - 17.23 07	612.381 -		620.281	- 01,0301
17.2308	612.782 -			04.0300
601.381 - 17.23 07	612.887 -			17.0100
601.782 - 17.2307	012.007	17.4333		17, 0300
601.885 - 17.2307	610 000	TH 0000		17,0302
	613.380 -			
602.380 - 17.2303	613.381 -			17.0303
	613.687 -	17,2399		17.0402
602.782 - 17.23 03	613.782 -	17.2399		17.1003
602.885 - 17.2303			_	17.3100
603,280 - 17,2303	614.782 -			- 17,0302
	614.884 -	17.2400	620.884	- 01,0301
603.380 - 17.2303				17,0300
6 0 3.782 - 17.23 03	615.782 -	17.23 03		17.0302
603 . 885 - 17.23 03	615.885 -			17.03 03
				17.1003
604.130 - 17.2303	616.380 -	17.2304		
604.280 - 17.23 03		17,2305	621.228	- 17.0401
604.380 - 17.23 03			621,281	- 16.0101
604.782 - 17.23 03	616.381 -	37 2400		
604.885 - 17.2303			621 381	17.0401 - 17.0401
	616.780 -	444 444 1444 1444	621 791	- 17,0401
605,280 - 17,2303	616.782 -			
605.380 - 17.2303		17.2304	021.084	- 17.0401
	616.885 -	17.2304		
605.782 - 17.2303		17,2305		- 17,2200
605.885 - 17.2303	616.280 -	17.2304		- 17.2200
			623.381	- 17,2200
606.280 - 17.23 03	617.380 -	17.2305	623.884	- 17.22 00
606.380 - 17.23 03		17.2304		- 17,2200
606.782 - 17.23 03	0171700 -	17.2399		
	617.782 -		624 201	- 31 25 01
607.782 - 17.23 03	01/1/02 =	1 C 444 900 C 2000 C 20		
	617 005	17.2305	624.381	- 01,6301
609.280 - 17.2399	617.885 -	17.2304	624.781	- 81,6301
*·		17.2305	624.884	- 01.0103
609.380 - 17.2303		17,2399		01.0301
17.23 99				



D.O.T.	0.E	D.O.T.	0.E.	D. 0).T.	0.E.
	- 17,1200 17,3100 - 17,3100	660.131 - 660.280 -		681	886 🍨	17.3399 17.3399 17.3399
_	- 17.1100	661.281 - 661.380 -				17.3399
629.281	- 16.0109	662,782 -		682	2.687 🚽	17.3399 17.3399
	- 17.1003 - 17.1003	662.885 -	17,3601	682	2.887 -	17.3399
	- 17.0600 - 17.0600	663.782 - 663.885 -	79999999999999999	683	3.288 🚽	17.3399 17.3399 17.3399
	- 17.0100		17,3699	683	3.384 🖣	17.3399 17.3399
627 201	17.0101 17.0202 - 17.0101	664.782 -	17.3699	683	3.684 🖣	17.3399 17.3399 17.3399
	- 17.0202	665.782 -	17.3601	. 683	3.780 🚽	17.3399 17.3399
638.281	- 16,0111 16,0113	666.782 -	,,,,,,,,,,,,	683	3.782 🚽	17.3399 17.3399
	17,1099	667.382 - 667.782 -	17.3601	<u> </u>		17.3399
	- 17,1901 - 17,1901	667.885 -	17.3699 17.3601 17.3699	684	.280 🚽	17.3399 17.3399 17.3399
651.280	- 17.1902 - 17.1902	668.782 -	_	684 684	1.684 - 1.687 -	17.3399 17.3399
651.782	- 17.1902 - 17.1902 - 17.1902	668.885 -	17.3699			17.3399 17.3399
651.886	- 17.1902	669.28/ 669.38//	17,3601			17.3399 17.3399
653.687	- 17.1906 - 17.1906	669.687 -	17.3699 17.3699	685	5.780 -	17.3399 17.3399
653.782	- 17.1906 - 17.1906	669.780 -		685	5.885 🚽	17.3399 17.3399
	- 17.1906 - 17.1906	677.782 -	17.36 01		_ _	17.3399 17.3399
	- 17.1901 - 17.1901	679.380 -	17.2101	689	3.384 -	16.0699 17.3399
	- 17.1901	680.885 -	17, 35 99	689 689	9.687 - 9.780 -	17.3399 17.3399
659.380	- 17,1900 - 17,1903	681,131 -			á	17,3400 17,3399
659.782	- 17,1999 - 17,1999 - 17,1906	681.137 - 681.280 - 681.685 -	17.3399			17.3399 17.3400
		681.687 - 681.780 -	17.33 99			
		681.782 -				



D.O.T.	0.E.
690.782 - 690.885 -	17.3401 17.2700 17.3401
691.782 -	17.2700
693.281 -	17.0401 17.2309
693.381 -	17.0401
699.782 -	17.3401

	D.O.T.	0.E.	D.O.T.	0.E.
7	714.281 - 714.381 -		729.384 - 729.684 -	
D.O.T. O.É.	715,281 -		737.387 -	17.2400
704.381 - 17.2399 704.884 - 17.2399	715.381 -		739.381 -	
705.781 - 17.2302	716, 884 -			17.3399 17.3500
17,2399 17,2307	719.281 -	17,1501	739.781 - 739.884 -	
705.884 - 17.23 01 17.2302	720.281 -	17.1503	753.381 -	17,3401
17,2303 17,2307	721.131 - 721.281 -		753.884 -	
17.2399	721,381 -	17.9403	754.381 -	17.36 99
709.387 - 17.2400 709.687 - 17.2400	721.884 - 721.887 -	17.1403	754.884 -	17,2700
710,128 - 16,0113	722.281 -		760.884 -	17.3601
710.281 - 17.1502 17.2101	722.381 -	500000000000000000000000000000000000000	761.281 - 761.381 -	
710.381 - 17.1502 17.2001	723.381 -	16.0111 17.0201	761.884 -	17.3699
17.2101 710.781 - 17.2101	723.887 - 723.884 -	· 17.0101		17.3699
711.138 - 17.2101	724,281		762.687 - 762.884 -	
711.381 - 17.2101 711.384 - 17.2101	724.381		763.884 -	17.3601
711.387 - 17.2101 711.587 - 17.2101	724.384 -	17.1403 17.1403	764.131 -	17.3699
711.687 - 17.2101 711.781 - 17.2101	725,484		764.387 - 764.687 -	
711.884 - 17.2101		16.0108	764.884 - 764.887 -	17.3699
712.281 - 07.0103 07.0404	726.381 -	17.2002 17.1500	769,281 -	
16.0109 712.381 - 07. 0103		17.2400	769.687 - 769.884 -	17,3501
712.781 - 02.0103 712.884 - 07.0404	-	- 16,0107	769.887 =	
713,251 - 07,0601		- 16,0108	777.381 -	17.2700
713,281 - 07,0601 17,2101	, ,	17.1401 17.1502	779.884 -	17.2700
713.381 - 17.2201 713.781 - 17.2101	729.381	- 17.0401 17.1401	780.131 - 780.137 -	
713.884 - 07.0601		17.1501 17.1502	780.381 -	
		17.1903		



D.O.T. 0	.E.	D.O.T.	0.E.
780.587 - 17.	3500	788.131 -	17 3401
780.684 - 17.		788.137 -	
780.687 - 17.		788.281	
780.884 - 17.		788.381	
	35 00		
780.887 - 17.		788.384 -	17:3401
/00,00/ - \$1/4	3300	788.584 - 788.587 -	17,3401
781.132 - 17.	3300	788.687 -	
781.281 - 17.		788.884 -	
781.381 - 17.		788.887 -	
	33 99	/00,00/	1743401
781.484 - 17.		7 8 9.387 -	17 2800
781.684 - 17.		789.684 -	
781.687 - 17.			09.0202
781.781 - 17.			***
781.884 - 17.		700 701	17.3300 17.3400
781.887 - 17.		789.781 - 789.884 -	17.3400
/01.00/ = i/k	33 55	789.884 -	
782.781 - 17.	3302	709.004	17.1000
	3399		
782.782 - 17.			
- 17. 17.	37 37 17		
782.884 - 09.			
	1600		
17.	33 99		
784.281 - 17.	3300		
784.781 - 17.			
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785.261 - 17.	2.2∩2		
785.281 - 17.			
785.361 - 09. 785.381 - 09.		•	
	3301		
	3301 3302		
	3302		
786.134 - 17.	33 99		
	33 99		
	339 9 3399		
100.000 - 1/8	9 933		
787.138 - 17.	3300		
787.381 - 17.	3399		
	0204		
	3 3 99		
787.885 - 17.	3399 3399		
	3399 3399		
/0/•00U - NA			



	D.O.T.	0 . E.	D.O.T.	0.E.
8	809,781 - 809,884 -		825.281 -	17.0303 17.0401 17.1099
D.O.T. 0.E.	810.782 - 810.884 -		825,381 -	17,1401
800.782 - 17.2304 800.884 - 17.2304	812.884 -	· · ·		17.1099 17.1401
801.281 - 17.2304	813.380 -		825.884 =	-
801.381 - 17.01 00 17.0401	813,885 -	17,2306	826.381 -	
17.1099 17.2302	814.380 -		827.281 -	17.0201
801.781 - 17.1099 801.884 - 17.1099	814.780 - 814.782 -	17.2306	827.381 -	i7.0200
801.887 - 17.10 99 17.2204	814.884 - 814.885 -		827.387 -	17,1401 17,0101
804.281 - 17.2305	816.784	17.3806	827.884 -	17.0101 17.0201
804.884 - 17.109 9 17.2304	816.884	17,2306	827.887 -	15,5201
804.886 - 17.2304	819.381 -	17,2306 17,2400	828.251 - 828.281 -	
805.131 - 17.40 99 805.281 - 12.10 99	819.781 -			17.1400
805.381 - 17.10 99 805.387 - 17.10 99	820.281 -	17,1401 17,1403	8 29.281 -	17, 1999 17, 1501
805.781 - 1999 805.885 - 1999	820. 781 -		829.381 -	
805.887 - 25.30 99 805.997 - 1.0 99	821,131 -		829.884 -	
806,281 - 16,0109	821.281 - 821.381 -	17,1402	829.887 -	
17.1099 17.3100	021 , 301 -	17.1402 17.1403	840.131 - 840.381 -	
806.381 - 17.03 00 17.0401	821.387 - 821.884 -	17,1402	840.781 - 840.884 -	17.1005
17.2304 806.781 - 17.23 04	822.281 -		840.887 -	17.1005
806.884 - 17.0303		17,1501	043 701	17,1008
806.887 - 12.35 00	822.287 -	17.1402 17.1401	841.781 -	
807.287 - 2.0301		17.1402 17.1501		17,1006
807.381 - 7.0001 807.387 - 7.000	824.138 -		842.884 =	17.1008
807.884 - 17.0301 17.0303	824,281 - 824,381 -	17.1002	842.885 - 842.887 -	200000000000000000000000000000000000000
809.381 - 17.1099		17,1401		
17.2304 17.2305				



D.O.T. O.E.	D.O.T. 0.E.	D.O.T. 0.E.
843.782 - 17.23 99 843.884 - 17.10 05	862.281 - 17.0102 17.1007	911.131 - 18.08 01 911.138 - 04.19 00
884.781 - 17.1099	- 862.381 - 17.01 02 1 7.04 01	17. 56 02 911.168 - 17.0899
844.884 - 17.1099	17.10 07	911.388 - 14.0505
844.887 - 17.1099	862.685 - 17.24 00	911 . 488 - 14.05 05 911 . 687 - 17.08 01
045 701 3 7 0501	862.687 - 17,1607	911.687 - 17.0801
845.781 - 17.0301	862.884 = 77.0202	911 . 883 - 17.08 99 911 . 884 - 17.08 01
849.781 - 17.0401	. 17.1007 862.887 - 17.0102	911.887 - 17.0801
850.781 - 17.1099	062 201 77 7000	
850.782 - 17.1003	863.381 - 17.1099 863.781 - 17.1099	912.138 - 04.1900
850.883 - 17.1003	863.884 - 17.1099	912.168 - 04.1900
		912.368 - 04.1900
851.782 - 17.1003	864.781 - 17.10 99	17.0403
851.883 - 17,1003		
851.884 - 17.1007	865.131 - 17.1009	913.138 - 04.19 00
050 000 17 1000	865.781 - 17.1099	913.168 - 04.1900
852.883 - 17.10 03 852.884 - 17.10 03	865.884 - 17.0303	913.463 - 04.1900
17.1099	17.1009 865.887 - 1 7.10 09	914.168 - 04.1600
***************************************		914.182 - 16.0116
853.782 - 17.1003	866.381 - 17.10 10	914.782 - 17.3202
17,1099	866.884 - 17.1010	914.885 - 17.3202
853.883 - 17.1003	17.1099 866.887 - 17.1010	
853.884 - 17,1099	866 . 887 - 17.10 10	915 . 137 - 04.03 00
853.885 - 17.1099	869.281 - 17.0102	915.867 - 04.1600
853.887 - 17 .1099	17.0900	17,0300
050 201 17 1000	17,1099	915.878 - 04.0300
859.281 - 17.1099 859.782 - 17.1003	869.287 - 17.09 99	04.1600
859.883 - 17.1003	869.381 - 17.09 99 869.782 - 17.1 003	919.168 - 14.0505
859.884 - 17.1004	369.883 - 17.10 03	919.368 - 04.0300
859.885 - 17.1003	869.884 4 17.1007	04.1900
17.1099	17, 1099	14,0505
859.887 - 17.1099	869.887 - 17.01 02	919.478 - 04.0300
		919.782 - 17.3000
860.131 - 17.1001	891.884 - 17.1099	919.883 - 04.0800
860.137 - 17.1001	200 201 37 7002	200 007
860.281 - 17.1001 860.381 - 17.1001	899.281 - 17.1003 899.884 - 17.1004	920.887 - 04.06 00
860.781 - 17.1001	099.004 - 17, 1904	021 002 17 1602
860.884 - 17.1001	\boldsymbol{O}	921.883 - 17.10 03 921.887 - 17.10 03
860.887 - 17.1001	7	521.007 = E78.1903
	909.138 - 04,1900	922.137 - 04.1900
861.381 - 17.1004	010 100	922.885 - 17.0800
861.781 - 17.1004	910.138 - 04.1900	922.887 - 04.2000
	910.368 - 04.1900	
		929.137 - 04.0900
		04.1900



D.O.T.	0.E.		D.O.T.	0.E.
	- 16.0116		972.281 -	17.1903
	- 16.0116		972.381 -	17,1903
930.281	- 16.0116		972.382 -	17,1903
		i		17, 1903
	- 17.3000		972.782 -	17.1903
950.168	- 16.0107		972.887 -	17.1903
9 50.7 82 ·	- 17.30 00			
	17.3201		973.138 -	17, 19 01
	17.3202		973.381 -	17.1901
950.885	- 17.0103	-		
	17.32 02	•	974.381	17.1903
951.885	- 17.3200		976.131 -	17.0901
		i	976.381 -	17.0901
952,138	- 16.01 13		976.387 -	17.0901
952.281	- 17.32 01		976.588 -	17.0901
952.380	- 17.2001		976.687	17.0901
952.387	- 17.32 01		976 782	17.0001
952 388	- 17.3201		976.782 - 976.884 -	17.0901
952.588	- 17.3201		976.885 -	17.0901
952.781	- 17.3201		976.886 -	17.0901
952.782	- 17. 32 02		976.887 -	
302.702	17.3201		370:007	1710501
		.	977.781 -	17.09 01
953.380	- 17.32 02		977.884 -	
953.387	- 17.2304		3771004	111100
953.782	- 17.32 03		979.081 -	17.1903
300170E			979.138 -	17.1900
954.782	- 17.32 03		979.381 -	
			3,3,000.	17.1903
955.782	- 17.32 03			17.1905
		ı	979.382 -	17,0901
957, 282	- 16.0108		979.387 -	17.0901
			979.781 -	
969.261	- 09.02 02		979.782 -	17.1903
			979.884 -	
970.081	- 04.0100		3.0,00	17.1905
	- 17.0700		979.886 -	17.1904
J, 0 E01	17.0901-		979.887 -	
970.381	- 17.0703		<u> </u>	*** 1 1 2 4 4
370.00.	17.0903			
	17.1904			
971.281	- 17,1904			
971.381	- 17,1904			
. •	17.1905			
971.684	- 17.19 04			
	- 17.1904			
971.884	- 17,1904			
971.885	- 17.19 04			
	- 17.19 04			



APPENDIX C
APPENDIX TABLES

APPENDIX TABLE C-1
REASONS FOR LEAVING FIRST JOB HELD BY PROGRAM AREA

Reasons	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
Took a better job	25.5	31.0	21.3	31.4	22.4	34.0	30.3
Entered school	20.0	22.4	33.3	18.5	10.5	11.7	20.3
Temporary job ended	23.6	11.9	10.7	13.1	10.5	06.4	12.5
Laid off	10.0	06.1	01.3	09.5	14.0	10.6	08.0
Pay too low	03.6	06.6	08.0	07.6	09.1	10.6	07.1
Military service	11.8	01.6	00.0	09.3	03.5	03.5	04.9
Moved away	00.0	04.4	04.0	01.7	07.0	04.3	03.4
Disliked the work	00.9	03.9	00.0	02.8	01.4	06.4	03.2
Got married	00.0	03.8	05.3	00.9	09.1	01.1	02.9
Disliked the hours	0 0.9	01.6	01.3	02.3	00.7	05.3	01.9
Family reasons	01.8	01.9	02.7	8.00	05.6	01.1	01.7
Disliked the people	0 0.9	02.1	01.3	01.3	00.7	00.0	01.6
Health problem	00.9	01.0	06.7	00.6	04.2	00.0	01.1
Too far to drive	00.0	01.7	01.3	00.3	01.4	00.0	01.1
Number responding	110	1319	7 5	896	143	94	2637



APPENDIX TABLE C-2

REASONS FOR LEAVING SECOND JOB HELD BY PROGRAM AREA

Reasons	AGR I BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
Took a better job	17.4	21.4	29.6	23.1	23.6	18.8	22.1
Temporary job ended	26.1	20.5	03.7	14.4	16.4	09.4	17.6
Entered school	13.0	14.7	14.8	11.9	01.8	12.5	12.9
Laid off	15.2	08.9	00.0	18.6	07.3	21.9	12.8
Disliked the work	02.2	06.5	07.4	08.2	16.4	03.1	07.3
Pay too low	02.2	06.1	07.4	07.4	09.1	03.1	06.5
Moved away	02.2	05.4	03.7	03.0	05.5	06.3	04.3
Military service	10.9	02.2	00.0	04.2	00.0	00.0	03.1
Disliked the people	02.2	02.8	03.7	02.7	01.8	06.3	02.8
Too far to drive	00.0	03.5	03.7	02.0	03.6	03.1	02.8
Disliked the hours	06.5	02.2	03.7	02.2	01.8	03.1	02.4
Got married	00.0	03.0	ŨŨ. O	01.0	00.0	03.1	01.9
Health problem	02.2	01.5	11.1	00.7	07.3	06.3	01.9
Family reasons	00.0	01.5	11.1	00.5	05.5	03.1	⁻ 01.5
Number responding	46	541	27	403	55	32	1104



APPENDIX TABLE C-3
REASONS FOR LEAVING THIRD JOB HELD BY PROGRAM AREA

Reasons	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
Took a better job	31.8	13.5	16.7	24.2	05.9	06.3	18.1
Laid off	09.1	14.5	00.0	19.3	17.6	18.8	15.9
Temporary job ended	22.7	15.5	00.0	13.7	11.8	06.3	14.3
Entered school	13.6	17.1	16.7	08.1	05.9	00.0	12.4
Pay too low	00.0	08.8	00.0	10.6	05.9	18.8	09.0
Disliked the work	00.0	05.7	08.3	06.8	11.8	06.3	06.2
Moved away	00.0	06.2	00.0	04.3	05.9	12.5	05.2
Disliked the hours	00.0	04.1	25.0	03.7	00.0	12.5	04.5
Disliked the people	13.6	03.1	08.3	03.1	11.8	00.0	04.0
Too far to drive	04.5	02.1	08.3	03.1	11.8	00.0	03.1
Military service	04.5	02.1	08.3	01.9	00.0	12.5	02.6
Health problem	00.0	04.1	00.0	00.6	00.0	06.3	02.4
Family reasons	00.0	02.1	08.3	00.6	11.8	00.0	01.9
Got married	00.0	01.0	00.0	00.0	00.0	00.0	00.5
Number responding	22	193	12	161	17	16	421



APPENDIX TABLE C-4
REASONS FOR LEAVING FOURTH JOB HELD BY PROGRAM AREA

Reasons	AGRI BUS %	BUS OCC %	HLTH OCC %	IND OCC %	P&P SERV %	SPEC PROG %	STATE
Took a better job	14.3	24.1	33.3	23.7	00.0	33.3	23.1
Temporary job ended	28.6	22.2	00.0	13.6	20.0	16.7	17.9
Laid off	14.3	11.1	00.0	18.6	00.0	00.0	13.4
Entered school	00.0	18.5	00.0	03.4	00.0	00.0	10.4
Pay too low	14.3	01.9	00.0	11.9	20.0	00.0	07.5
Moved away	00.0	07.4	00.0	08.5	00.0	00.0	06.7
Disliked the work	00.0	05.6	00.0	05.1	20.0	16.7	06.0
Too far to drove	00.0	00.0	00.0	08.5	20.0	00.0	04.5
Got married	00.0	01.9	00.0	01.7	00.0	16.7	02.2
Health problem	00.0	01.9	00.0	01.7	00.0	16.7	02.2
Disliked the people	00.0	01.9	33.3	00.0	00.0	00.0	01.5
Disliked the hours	00.0	01.9	00.0	01.7	00.0	00.0	Ū1 .5
Family reasons	00.0	01.9	00.0	00.0	20.0	00.0	01.5
Military service	00.0	00.0	33.3	01.7	00.0	00.0	01.5
Number responding	7	54	3	5 9	5	6	134



APPENDIX TABLE C 5

CORRELATION BETWEEN EMPLOYER/SUPERVISOR APPRAISALS OF READINESS FOR EMPLOYMENT AND ALUMNI APPRAISALS OF HELPFULNESS OF EMPLOYMENT PREPARATION

Correlation Matrix
0.9809
0.7528
0.6914
0.6173
0.592 5
0.3685
0.0245



APPENDIX TABLE C-6

EMPLOYER/SUPERVISOR RATINGS* OF EMPLOYEE PREPARATION FOR EMPLOYMENT BY REGIONS

<u></u>	Caal		· · · · · · · · · · · · · · · · · · ·	Region	ıs			
Aspects of employment	Cook Co.	I	ΙΙ	III			VI	State
Cooperativeness, ability to work with others		3.78)(01.2)						3.83 (01.1)
Attendance, reporting for work regularly		3.79)(01.0)						3.80 (01.0)
Accepting advice and supervision		3.74)(00.8)						3.76 (00.9)
Serving the public, patient etc.		3.64)(26.8)						
Safety habits, minimizing chance for accidents		3.67)(19.1)						
Appearance, presenting a business image		3.64)(07.3)						3.66 (08.0)
Quality of work, ability to meet quality demands		3.66 (01.8)						
Quantity of work, output of satisfactory amount		3.63)(01.0)						3.65 (02.0)
Dependability, thorough completion of a job		3.62)(01.3)						
Adaptable to new situations		3.59)(04.2)						
Use of tools and equipment		3.54)(15.5)						
Being able to talk to ther boss about job problems		3.54)(03.2)						
Selection and care of space, materials, and supplies		3.54)(18.0)						
Initiative, doing jobs that need doing		3.50 (02.5)						
Job know-how, application of technical knowledge and skill *Ratings indicate the average	(12.3)	(13.9)	(15.7)	(15. <u>5)</u>	<u>(13.1)</u>	(17.0)	<u>(15.6)</u>	(14.2)

Ratings indicate the average on a four point scale: 1=Not at all prepared; 2=Poorly prepared; 3=Somewhat prepared; and 4=Well prepared. The numbers enclosed in parenthesis is the percentage of employers who indicated the specific aspect of employment did not apply to the job held.

C-6



APPENDIX TABLE C-7

PERSONAL QUALITIES AND JOB SKILLS CONSIDERED MOST IMPORTANT ACCORDING TO EMPLOYER/SUPERVISORS BY REGIONS (Multiple responses)

				Region	ıs			
Personal qualities and job skills	Cook Co. %	I %	I I %	III %	IV <u>%</u>	V <u>%</u>	V I _%	State %
Ability to get along with othersother workers, customers, patients	48.8	56.8	51.0	57.4	57.7	50.9	58.2	53 .6
Accuracy, quality, and thoroughness	55.5	53.5	53.6	43.5	46.0	47.2	45.3	51.2
Positive attitude toward work	43.4	42.1	39.5	39.5	39.3	41.9	38.8	41.3
Dependability	35 .6	33.8	36.2	40.4	36.2	39.2	44.7	36.7
Judgmentability to make decisions, ability to plan and organize	25.0	25.6	22.4	26.0	26.4	26.0	31.8	25.5
Attendance and punctuality	29.4	25.9	22.7	24.7	22.4	18.1	25.3	25.0
Competency in using job tools, machines and materials	21.2	24.0	21.2	21.5	20.6	20.4	20.0	21.6
Initiative	17.4	18.8	20.7	18.8	18.7	19.6	21.8	19.0
Appearance and grooming	13.1	11.3	14.0	13.5	12.3	15.8	11.2	12.9
Work quantity	11.3	10.5	11.7	13.9	11.7	11.7	09.4	11.4
Other	01.2	01.4	00.5	00.4	01.5	01.1	00.6	01.1

The percentages will not total 100 percent due to multiple responses to this item. Each employer/supervisor was asked to check 3 personal qualities or job skills that were most important for a person entering the job held by the employee being rated. The table should read--of the employer/supervisors responding to this item, 53.6 percent checked ability to get along with others. . . .as an important entry level skill.



APPENDIX TABLE C-8

REGRESSION ANALYSIS OF ALUMNI ASSESSMENTS OF TRAINING CONTRIBUTION TO EMPLOYMENT BY PROGRAM AREA AND JOB RELATEDNESS

		Pro	Program Area		~	Relatedness	
Dependent Variable	F Ratio	Regression Coefficient	Standard Error	Partial Correlation Coefficient	Regression Coefficient	Standard Error	Partial Correlation Coefficient
Interviewing for a job	35.05**	1667**	.0199	1382	0307	.0324	.0158
Applying for a job	25.79**	1434**	.0200	1189	0253	.0325	0130
Knowing how to use tools and equipment on the job	22.36**	0831**	. 0203	0672	.1584**	.0331	.0795
Knowing what one does in this kind of job	10.38**	0205	.0207	0165	.1445**	.0337	.0713
Being able to talk to the boss about job problems	7.31**	.0351	.0197	.0297	1004**	.0320	0522
Finding needed information	4.54*	0529**	.0203	0435	.0383	.0330	.0194
Understanding union membership	2.94	0584*	.0245	0396	.0061	.0400	.0025
Using time and energy	2.44	0346	.0194	0298	.0333	.0315	.0177
Handling new or unpleasant situations	.59	0203	.0195	0174	.0052	.0317	.0027
Getting along with other workers	.41	.0032	.0197	.0027	0278	.0320	0145
Getting along with the customer, patient, etc.	.12	-,0088	.0213	6900	0108	.0346	0052
*Significant at the .05 le **Significant at the .01 le	leve]]eve]						



APPENDIX TABLE C-9

REGRESSION ANALYSIS OF ALUMNI RECOMMENDATIONS FOR PROGRAM IMPROVEMENT BY PROGRAM AREA AND JOB RELATEDNESS

		Pro	Program Area		Re	Relatedness	
Dependent Variable	F Ratio	Regression Coefficient	Standard Error	Partial Correlation Coefficient	Regression Coefficient	Standard Error	Partial Correlation Coefficient
Training needs to be more like the real job	15.64**	0175**	.0058	0504	.0403**	.0094	.0713
Training should include: Getting along with boss; co-workers, customers; income tax; license exams; union; dress; etc.	15,31**	0287**	.0055	0874	2600.	6800.	.0173
Greater choice of programs	6.19**	0174**	.0050	0577	0082	.0082	0168
Training should prepare you for several jobs	4.27*	0161**	.0056	0485	0012	0600.	0023
Training should prepare for one job only	3.59*	.0047*	.0020	0380.	.0052	.0033	.0264
Other	1.18	.0045	.0029	.0257	.0013	.0047	.0046
Teachers should know more about the jobs they teach	.81	0047	.0040	0198	.0039	.0065	6600
More help with knowing how and where to get a job after high school	.58	0033	.0057	0097	0600	.0092	0163
More help in learning about jobs, high school courses, post-high school training	.43	0022	9900	0056	9600	.0106	0150



Appendix Table C-9 Con't.

		Pro	Program Area		æ	Relatedness	
Dependent Variable	F Ratio	Regression Standard Coefficient Error	Standard Error	Partial Correlation Coefficient	Regression Coefficient	Standard Error	Partial Standard Correlation Error Coefficient
No improvements needed	.31	0027	.0042	0108	0036	.0068	0087
Greater variety of class classroom activities	.22	0032	.0049	0106	6000.	.0080	.0018

*Significant at the .05 level **Significant at the .01 level



APPENDIX D SURVEY INSTRUMENTS AND COVER LETTERS

ALUMNI SURVEY COVER LETTER FIRST MAILING

(To be typed on local district letterhead)

Dear Alumnus:

We are evaluating the effectiveness of the occupational training we provided members of the "Class of '71". One purpose of the occupational program you took was to prepare you for work. The student who took the training and his employer are the best persons to tell us if we did what we set out to do.

So future students can be better prepared for employment, will you take a few minutes to fill out the enclosed questionnaire? No individual will be indentified in the results of this study. The answers you give to the questions will be kept in strict confidence. It is important to know how your employer or supervisor feels about the training you took in high school. Giving the name and address of your present employer or supervisor will enable us to contact him/her for this information.

We have contracted with the Center for Educational Studies at Eastern Illinois University to collect and tabulate the completed questionnaires. Would you complete the questionnaire as soon as possible and mail it in the enclosed stamped envelope? The envelope is addressed to the Career Education Followup Study, Eastern Illinois University. Thank you for your valuable contribution to the improvement of job training for future students.

Sincerely,

(Signature and title of a local school person whom the student will know)



ALUMNI SURVEY REMINDER NOTICE SECOND MAILING

Dear Alxmnxs:

Help!!! We're looking for a MISSING QXESTIONNAIRE! If yox've retxrned yoxrs, yox've aiready helped and don't need to read the rest of this card.

This message may be a little hard to read because the **U** is missing on our typewriter. Our survey is like the typewriter-a little hard to complete because you are missing.

Yox are only one person, but one person can really make a difference just as only one key made a disaster out of ihis message! Would you mail your completed questionnaire today, please!!!

THANKS



ALUMNI SURVEY COVER LETTER THIRD MAILING

(To be typed on local district letterhead)

Dear Alumnus:

In case you did not recieve our earlier letter, this second copy of the questionnaire is being sent. You still have an opportunity to let us know how well the occupational training you took in high school prepared you for work.

Many of your 1971 classmates have already returned their questionnaires. Won't you help us improve the occupational training of future students by mailing your completed questionnaire today? We have enclosed, for you convenience, a stamped envelope addressed to the Career Education Followup Study at Eastern Illinois University.

Thank you for your help.

Sincerely,

(Signature and title of a local school person whom the student will know)



.

A FOLLOWUP SURVEY OF FORMER OCCUPATIONAL STUDENTS



Name and Occupational Program Taken		FILL IN YO	ur soci	AL SEC	URITY N	IUMBER
If your name and address are wrong on the white	label above	, PRINT correct	ions belo	w.		
Correct NameLast Name		Fir	st Name	м	Ī	
Present AddressNumber and Street	et or Rural	Route		-		
City		State	z	p Code		
DIRECTIONS: WHERE THE WORDS <u>THIS OCCUPATIONAL PROGRAM</u> A LAST LINE OF THE WHITE LABEL ABOVE. WHERE YOU ARE ASKED TO "CHECK" A BOX, THE C						
PART I SINCE HIGH SCHOOL Give the month and year you last attended high school. Month / Year Sex: Male Female	since 1 1	the box before leaving school. One job Two jobs Three jobs Tour or more jour Tone Two changed job	bs			
Check the box before the reason you left high school at that time.	ctrcle changed	the number to	the right	of the	reason wh	y you
1 Graduated 2 Went to work	REASON	FOR LEAVING	First	JOBS I Second		Fourth
3 Didn't like school	<u>Took a</u>	better job	1	1	1	1
4 Personal reasons	Tempora	ry job ended	22	2	5	2
5 Entered another school or training program	Laid of	ff	3	3	3	3
Check the box before the length of time it took you	<u>Dislike</u>	ed the work	4	4	4	4
to find your first job after leaving high school.	<u>Dislike</u>	ed the people	5	5	5	5
1 Less than one month	i ———	ed the hours	6	6	6	6
2 One to three months	Pay to		7	7	7	7
3 Three to six months	Family	reasons	8	8	8	. 8
4 Over six months	Got man	rried	9	9	9	9
5 No job since leaving high school		ry service	10	10	10	10
If you have been out of work at any time since leaving		d school	11	11	11	11
school, how many weeks were you not employed?	Moved		12	12	12	12
		problem	13	13	13	13
Number of weeks	Too fa	r to drive	14	14	74	14



Continued, next page

8. If you have NEVER HAD A JOB SINCE LEAVING HIGH SCHOOL,	13. Type of Business
check the box before the reason why.	(Such as: electronics, auto repair,
l [] I'm in school	department store, shoe factory,
	grocery store, etc.,)
2 I have not been able to get a job	14. What are your job duties: ("Job duties" are tasks
3 Do not want a job	you are required to do in your job, such as: make
4 Couldn't get into the union	beds, order supplies, prepare food, read blueprints.
5 I'm in the military service	layout machine parts, repair equipment.) Please lis-
6 Poor health	all your duties.
7 I can't make enough money to make it worth	
working	
8 Other	
(Specify)	
Check the box before the one answer that best describes what you are doing now.	ĺ ————————————————————————————————————
1 [Free loved 6:11 Aims /or to a sur	
Employed full-time (35 hours or more a week)	~
2 Employed part-time (less than 35 hours per week)	
3 Work part-time and go to school part-time	
4 Work full-time and go to school part-time	
5 Full-time student and work part time	(For School Use Only)
6 Full-time student	15 Cheel, the how before the ONE TUTNO YOU I THE MOST
7 Full-time homemaker	15. Check the box before the ONE THING YOU LIKE MOST about your job.
````	about you: job.
8 Unemployed but actively sceking a job	1 Good pay
9 🔲 Unemployed; not seeking work	2 Some of the things I do on the job (pleasant
10 Military service	job duties)
76 ··· 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1	3 Nature of the work (self-satisfying, variety,
10. If you work part-time (less than 35 hours a week)	challenging, etc.,)
check the box in front of the reason why.	4 The hours
1  That's all I care to work	5 Security of having a job
	6 Possibilities for advancement
2 That's all I can get	7 Meeting people
DIRECTIONS: IF YOU ANSWERED QUESTION 8, answer	8 Fellow workers
questions 19, 20, and 21 only.	9 Employer
IF YOU HAVE A JOB NOW, answer questions	
in Part II and Part III.	10 Everything
IF YOU HAVE HAD A JOB SINCE LEAVING	11 Nothing
HIGH SCHOOL, but are NOT EMPLOYED NOW,	16. Check the box before the ONE THING YOU DISLIKE MOST
answer questions in Part III.	about your job.
	_ `
PART II	l Low pay
EMPLOYMENT EXPERIENCE	2 Some of the things I do on the job (unpleasant
EMILOTMENT EXTENSE	job_duties)
DIRECTION: IF YOU HAVE A JOB NOW, answer the following.	3 Nature of the work (monotonous, routine, not
	self-satisfying) 4  The hours
11. Your job title	
(Such as: Shipping Clerk, Receptionist, Spot Welder, Nurse Aide, Grounds Keeper,	5 Some of the customers, patients, etc.,
Waitress, Clerk Typist, Diesel Mechanic)	6 Fellow workers
marting, order ighted breach incommitted	7 The boss
12. Supervisor's Name:	8 No possibilities for advancement
	9  Working conditions (too hot, dirty, too cold)
	10 No dislikes
(PRINT Supervisor's Name)	II Dislike everything
Business or Company name and address:	The province creationing
bus mess of company name and address.	17. How do you feel about this job?
	1 (T) Y 12 ha 24 manus much
· (Name of Business or Company)	l I like it very much
	2 I like it
(NumberStreet or Rural Route)	3 ☐ It's OK
tramper select of Matal Moute)	4 🔲 Not what I'd hoped
	5 🗍 It's awful
(City) (State) (Zip Code)	Continued, next page
•	
FRĪC	
Full Tax Provided by EBIC	

10.	TRAINED IN HIGH SCHOOL, check the box before the reason why.	DIRECTION: IF YOU HAVE A JOB NOW OR HAVE HAD A JOB AT ANY TIME since leaving high school, answer questions 22 and 23.
	Not presently employed Couldn't find a job for which I was trained I couldn't earn enough money Didn't know what the job was really like	22. In general, how much help was your high school occupational training in: (Circle the number that applies.)
	5 I didn't like the jobs for which I was trained	Doe no
	6 Needed more training and couldn't get it	None Little Some Much App
	7 No chance for promotion	<u> </u>
	8 Other	1. Knowing how to use
	(Write in)	tools and equipment
		on the job? ! 2 3 4 5 2. Knowing what one
	DADT III	does in this kind
	PART III	of job? 1 2 3 4 5
	YOUR HIGH SCHOOL OCCUPATIONAL TRAINING	3. Using time and
		energy? 1 2 3 4 5
19,	In addition to your own personal interest, who	4. Finding needed information? 1 2 3 4 5
	encouraged you most to enroll in this occupational	5. Being able to talk
	program? (Check the box before <u>only one</u> .)	to the boss about
	Parent(s), guardian, or family member	job problems? 1 2 3 4 5
	2 Guidance counselor or administrator	6. Getting along with
	3 A teacher	the customer, pa- tient, etc.,? 1 2 3 4 5
	4 A student who took the program	7. Getting along with
	5 A friend	other workers? 1 2 3 4 5
		8. Understanding union
	6 No one	membership? 1 2 3 4 5 9. Handling new or un-
	7 Other (Write in)	pleasant situations? 1 2 3 4 5
	(write in)	10. Applying for a job? 1 2 3 4 5
	What would improve the occupational training you received in high school? (Check the box before the	11. Interviewing for a job? 1 2 3 4 5
1 1	one(s) that you suggest.)  Training should include things like how to:     get along with other workers, the boss, the     customer; get into the union; take license     exams; file income tax; apply for workman's     compensation; dress for the job.  More individual help should be given to students     in learning what kinds of jobs they might get,     what courses to take in high school, what kind     of schooling they might need after high school.  More help with knowing where and how to get a     job after high school.  Training should prepare you for several jobs.  Training should prepare you for one job rather     than for several jobs.  Offer a greater selection of training programs.  Teachers should know more about the jobs they're     teaching.  Training needs to be more like the real job.  Greater variety of classroom activities (field     trips, etc.,).  No improvements needed.  Other (Use back page for other suggestions you     have.)	23.Check the box before the one thing that was hardest for you to learn when you first began working on the job.  1
	Would you recommend this occupational program to others?	Charleston, Illinois 61920
ļ	Yes [] No	



## EMPLOYER/SUPERVISOR SURVEY COVER LETTER FIRST MAILING

(To be typed on local district letterhead)

Dear Employer or Supervisor:

We are currently evaluating the effectiveness of the occupational training we provide high school youth. One of our occupational training objectives is to equip students with job skills required to enter the world of work. As the employer or supervisor of one of our former students, you can help us determine if we are doing what we have set out to do.

Will you take a few minutes to assess the preparation for employment of the employee named on the enclosed evaluation form? This is designed to give us vital information for determining the effectiveness and identifying strengths and weaknesses of present occupational training programs. No employee, employer, supervisor, or business will be identified in the results of this study. All responses to questions will be kept in strict confidence.

We have contracted with the Center for Educational Studies at Eastern Illinois University to collect and process study data. Would you complete the evaluation form as soon as possible and mail it in the enclosed stamped envelope? The envelope is addressed to the Career Education Followup Study, Eastern Illinois University. Thank you for your valuable contribution to the improvement of job training for future students.

Sincerely,

(Signature and title of a local school administrator)



## EMPLOYER/SUPERVISOR SURVEY REMINDER NOTICE SECOND MAILING

Dear Employer or Sxpervisor:

HELP!!! We're looking for a MISSING EVALXATION FORM! If yox've retxrned yoxr "Evalxation of Employee's High School Preparation for Employment" form yox've already helped and don't need to read the rest of this message.

This message may be a little hard to read because the **u** is missing on our typewriter. The other 44 keys are functioning properly, but one key makes a big difference. Our survey is much like the typewriter. If we're to have a meaningful survey, you are important.

Vox are only one person, but one person can really make a difference just as only one key made a disaster out of this message: You can make your contribution to the improvement of employment preparation of future high school students simply by mailing your completed evaluation form today.

THANK YOX



### EMPLOYER/SUPERVISOR SURVEY COVER LETTER THIRD MAILING

(To be typed on local district letterhead)

Dear Employer or Supervisor:

In case you did not receive our earlier letter, this second copy of the evaluation form is being sent so you will have the opportunity to let us know how you feel about the high school occupational training provided youth.

The early responses to our request for information from the employer/supervisors of our former students have been rewarding. An analysis of returns seems to indicate that employer/supervisors welcome the opportunity to assist school personnel in providing realistic employment education for students.

Won't you help us improve the occupational training of future students by mailing your completed evaluation form today? We have enclosed, for you convenience, a stamped envelope addressed to the data processing agency at Eastern Illinois University. Again let me assure you that your answers will be kept in strict confidence.

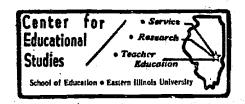
Thank you for your assistance.

Sincerely,

(Signature and title of a local school administrator)



# EVALUATION OF EMPLOYEE'S HIGH SCHOOL PREPARATION FOR EMPLOYMENT



To the Employer or Supervisor of:

			Em	ployee'	's Name	
		<del></del>			<u> </u>	
1. In what capacity are y	ou rel	lated to	the em	ployee	named a	above? (Check the box.)
1   Employer	2 🖂	Supervi	isor		3 🗂	Other
		• • •				(Write in)
2. What is the title of t	he ini	for whi	ich this	s amnle	waa is	hirad?
L. Milat 13 and troit of the	ic Jor	, 10, MIII	ÇII GILF.	2 Cubic	Jec 13	(Job title)
					<u> </u>	
In the following aspects of	emplo	ovment. I	now well	] prepa	red	4. How would you rate the suitability of the employee
was the employee previously	named	for the	a Job fo	or which	h	previously named for the kind of job held? (Check
nired? (Circle the number I	below	the answ	ver.)			the box that applies.)
# A	Not				Does	1 Exceptionally able
	at		Some-		not	2 Ne11
l lak kuan kan amali	<u>a?1</u>	Poorly	what	<u>We11</u>	apply	3 Acceptable
l. Job know-how, appli- cation of technical						4 Poorly
knowledge and skill	1	2	. 3	4	5	5 Not at all
2. Use of tools and						
equipment	1	2	3	4	5	5. Below is a list of personal qualities and job
Selection and care of space, materials, and						skills. Check the box before the three you
supplies	1	2	3	4	5	the job held by the previously named employee.
. Quality of work, ability						the job herd by the previously mailed emproyee.
to meet quality demands	1	2	3	4	5	Ability to get along with others
of satisfactory amount	1	2	3	4	5	other workers, customers, patients
Cooperativeness, ability	1	2	3	7	5	2 Initiative
to work with others	1	2	3	4	5	3 Positive attitude toward work
. Accepting advice and	_	_	_	_	_	4 Appearance and grooming
supervision	7	2	3	4	5	5 Judgmentability to make decisions,
Dependability, thorough completion of a job						ability to plan and organize  6 Competency in using job tools, machines,
without supervision	1	2	. 3	4	5	6 Competency in using job tools, machines, and materials
. Initiative, doing jobs			_	_		7 Dependability
that need doing	1	2	3	4	5	8 Accuracy, quality, and thoroughness
. Attendance, reporting for work regularly	1	2	3	4	5	9 Attendance and punctuality
. Appearance, presenting	•			•		10 Work quantity
a business image	1	2	3	4	5	11 Other
. Adaptable to new	•	2	3		-	(Write in)
situations Being able to talk to			3	4.	5	the the best of the state of th
the boss about job						Use the back of this sheet for other suggestions concerning high school occupational training.
related problems	1.	2	3	4	5	consecuting man action occupational training.
. Serving the public,					_	Return to: Career Education Followup Study
patient, etc Safety habits, minimizing	1	2	3	4	5	B-6 Student Services Building
chance for accidents	์ - 1	2	3	4	5	Eastern Illinois University Charleston, Illinois 61920



#### APPENDIX E

#### SAMPLE LOCAL SCHOOL DISTRICT REPORT

This appendix contains a sample of the report of the findings of the followup survey prepared for each local school district participating in the survey. Information in the report will enable local school district personnel to identify strengths and weaknesses of present programs of occupational preparation and determine implications for instructional modifications and program improvements.



#### A ONE YEAR FOLLOWUP SURVEY

E:



FOLLOWUP REPORT

> on the

"Class of '71"

OCCUPATIONAL PROGRAM ALUMNI

SAMPLE HIGH SCHOOL

District No. 00

Sample

Illinois 60000

The survey reported herein was conducted by The Center for Educational Studies, School of Education, Eastern Illinois University, Charleston Illinois, in cooperation with The Illinois Division of Vocational and Technical Education and Sample High School, District No. 00, Sample, Illinois, 60000.

Research and Development Project No. RDC-A2-079



#### HIGHLIGHTS

	TABLE 2
61%	Of the "Class of '71" occupational Alumni were employed full-time
13% 9%	<pre>at the time of the survey; were full-time students; and were unemployed and actively seeking work;</pre>
	TABLE 8
14% 16% 69%	Of the Alumni employed at the time of the survey were in jobs "closely related" to their high school occupational training; were in "related" jobs; and were in "non-related" jobs
	TABLE 11
77%_	Of the Alumni employed at the time of the survey indicated high satisfaction with their job;
20% 3%	indicated their job was OK; and indicated dissatisfaction with the job they held.
	TABLE 14
34%	Of the Alumni were encouraged to enroll in occupational training by counselors, teachers or administrators;
27%	indicated no one encouraged them to enter occupational training;
21%	were encouraged by their parents or family to enroll.
	TABLE 15
95%	Of the Alumni would recommend their occupational training program to others. TABLE 16 specified the recommendations respondents made for improving high school occupational training.
70	Employer/Supervisors of employed respondents were asked to
86%	evaluate Alumni readiness for employment and responded. TABLES 19 and 21 specify employers ratings and recommendations for occupational training.
	TABLE 20
31%	Of the Employer/Supervisors rated employed Alumni exceptionally able for the job they held;
45% 19%	were rated well suited for the job held; and were rated acceptable.



TABLE 1

RESPONSE SUMMARY BY PROGRAM TAKEN

Program Taken	Number of Questionnaires Sent	Percent Postally Returned	Percent Responding	Percent of Non-Usable Responses	Percent of Usable Reaponses for Questionnaires Assumed Received*
04.0000	26	11.54	43.48	10.00	39.13
07.0900	14	7.14	69.23	0.0	69.23
14,0000	21	9.52	78.95	0.0	78.95
14.0101	10	0.0	60.09	0.0	60.00
14.0702	10	0.0	80.00	0.0	80.00
14.0901	m	0.0	33,33	0.0	33, 33
17.0000	37	2.70	52.78	5.26	50.00
17.0300	4	0.0	20.00	0.0	50.00
17.1300	7	0.0	57.14	0.0	57.14
17.1500	13	15.38	36.36	0.0	36.36
17.1900	ഹ	0.0	90.09	0.0	00.09
17.2304	4	0.0	25.00	0.0	25.00
17.2902	က	0.0	29.99	0.0	66.67
18.9902	45	11.11	30.00	0.0	30.00
Total	202	6.93	51.06	2.08	50.00

* Questionnaires sent - Questionnaires postally returned (By U.S. Postal Service) - Questionnaires assumed received



TABLE

STATUS OF RESPONDENTS AT THE TIME OF THE SURVEY BY PROGRAM TAKEN

Military Service Ç Seeking Work 4 266king Work Unemployed; œ 8 3 Нотетакег ~ 9mit-[[μ] Status (In Percentages) quapnas 3 emit-[[u₁ Work Part-time σ Full-time Student; School Part-time Work Full-time; School Part-time Work Part-time; 116.7 00.0 00.0 00.0 00.0 00.0 00.0 Employed Part-time 4 66.7 75.0 50.0 25.0 25.0 25.0 33.3 0.0 0.0 100.0 80.0 Employed Full-time 56 Sample Size 46 TOTAL Program Taken 14.0101 14.0702 14.0901 17.0300 17.1300 17.1500 17.2304 17.2902 18.9902 07.0900 04.0000 4.0000



Question: Check the length of time it took you to find your first job after leaving high school.

:. TABLE 3

LENGTH OF FIRST JOB SEAPCH AFTER LEAVING HIGH SCHOOL BY PROGRAM TAKEN

-		Percent	Who Foun	d Employm	ent_in	Percent With
Program Taken	Sample Size	1 Month or Less	1 to 3 Months	3 to 6 Months	Over 6 Months	No Job Since High School
04.0000	8	62.5	0.0	12.5	0.0	25.0
07.0900	7	100.0	0.0	0.0	0.0	0.0
14.0000	14	71.4	21.4	0.0	7.1	0.0
14.0101	6	83.3	0.0	16.7	0.0	2.0
14.0702	8	50.0	12.5	37.5	0.0	<b>0.0</b>
14.0901	1	100.0	0.0	0.0	0.0	0.0
17.0000	16	75.0	12.5	0.0	6.3	6.3
17.0300	2	50.0	0.0	0.0	0.0	50.0
17.1300	3	100.0	0.0	0.0	0.0	0.0
17.1500	4	50.0	50.0	0.0	0.0	^ · O
17.1900	3	66.7	0.0	0.0	7.0	33.3
17.2304	1	100.0	0.0	0.0	0,0	0. C
17.2902	0	0.0	0.0	0.0	0.0	0.0
18.9902	11	81.8	0.C	0.C	9.1	9.1
TOTAL	94	62	8	5	3	6

Question: Check the number of jobs you have held since leaving high school.

TABLE 4

NUMBER OF JOBS HELD SINCE LEAVING HIGH SCHOOL BY PROGRAM TAKEN

		Percent Who Have Held					
Program Taken	Sample Size	No Job	One Job	Two Jobs	Three Jobs	Four or More Jobs	
04.0000	a	22.2	55.6	11.1	11.1	C.0	
07.0900	ċ	2.0	88.9	11.1	C. 0	C.C	
14.0000	15	C.C	60.0	33.3	6.7	0.0	
14.0101	6	0.0	66.7	33.3	0.0	0.0	
14.0702	Я	0.0	37.5	50.0	0.0	12.5	
14.0901	1	0.0	100.0	0.0	2.0	0.0	
17.0000	17	5.9	76.5	0 • C	0.0	17.6	
17.0300	2	50.C	0.0	50.Q	Ď.C	0.0	
17.1300	3	0.0	0.0	66.7	33.3	0.0	
17.1500	4	0.0	50.0	50.0	0.C	r.c	
17.1900	3	33.3	65.7	0.0	0.0	0.0	
17.2304	1	0.0	0.0	100.0	0.0	ň.,	
17.2902	2	0.0	50.0	0.0	0.0	FC.C	
18.9902	-12	8.3	41.47	25.0	16.7	8.3	
TOTAL	92	6	53	22	5	6	

ERIC

Full Toxit Provided by ERIC

Question: If you've changed jobs since leaving high school, check the reason why you changed. (Check only one reason for each job left.)

TABLE 5

REASONS FOR LEAVING JOBS BY PROGRAM TAKEN*

T00	Far to Drive	0.0000000000000000000000000000000000000	02.8	2
		635888888888888888888888888888888888888	05	
	Health Problem	0.0000000000000000000000000000000000000	01.4	
	Moved Away	000.0 000.0 000.0 000.0 000.0 000.0 000.0 000.0 000.0 000.0	7.60	7
	Entered School	00000000000000000000000000000000000000	12.5	6
	Military Service	4.0.0.000000000000000000000000000000000	02.8	2
	Got Married	4.000000000000000000000000000000000000	08.3	9
	Family Reasons	00000000000000000000000000000000000000	04.2	m
	too Low	0.0000000000000000000000000000000000000	6.90	5
	The Hours	0.0000000000000000000000000000000000000	04.2	က
Disliked	The People	000000000000000000000000000000000000000	01.4	-
	The Work	0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.	04.2	က
	Laid Off	0.000000000000000000000000000000000000		ω
Temp.	Job Ended	0.0000000000000000000000000000000000000	05.6	4
Took a	Better Job	05.0 00.0 00.0 00.0 00.0 00.0 00.0 00.0	25.0	18
	Program Taken	04.0000 07.0900 14.0000 14.0702 14.0702 17.0000 17.1300 17.1500 17.1500 17.2304 17.2304 17.2304	Total Percent	Total Job Changes

*Reported in percentages of total job changes

TABLE 6

REASONS FOR NEVER HAVING A JOB SINCE LEAVING HIGH SCHOOL BY PROGRAM TAKEN

					Reasons (il	n percentage	je)		
					Couldn't	In the		Can't Make	
Program Taken	Sample Size	In School	Unable to Get a Job	Do Not Want a Job	Get Into a Union	Military Service	In Poor Health	Enough Money	Other Reasons
04.0000	2	0.0	0.0	50.0	0.0	0.0	0.0	50.0	0.0
00,000	<b>-</b>	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14.0000	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C) • O
14.0101	О	0.0	0.0	0.0	0.0	o•0	0.0	ပ <b>•</b> ၀	တ <b>ံ</b> ပ
14.0702	0	0.0	0°0	0.0	0.0	0.0	0.0	0.0	ن• 0
14.0901	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.0000	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17,0300	0	0.0	0.0	0°0	0.0	0.0	0.0	0.0	0.0
17,1300	-	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.1500	_	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
17,1900	_	100.0	0°0	0.0	0.0	0.0	0.0	0.0	0.0
17.2304	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.2902	0	0.0	0.0	0°0	0.0	0.0	0.0	0.0	0.0
18.9902	-	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	~	4	်င		0		0	_	0



Question: If you work part-time (less than 35 hours a week) check the box in front of the reason why.

TABLE 7

REASONS FOR PART-TIME EMPLOYMENT BY PROGRAM TAKEN

Program <b>Taken</b>	Sample Size	That's all I care to work	That's all I can get
04.0000	Ö	0.0	<u> </u>
07.0900	1	100.0	0.0
14.0000	1	100.0	0.0
14.0101	2	100.0	0.0
14.0702	0	0.0	0.0
14.0901	0	0.0	0.0
17.0000	2	100.0	0.0
17.0300	Õ		0.0
17.1300	$\frac{-\delta}{0}$	0.0	
17.1500	Ö	0.0	0.0
17.1300	1	0.0	0.0
	<u>i</u>	0.0	100.0
17.2304	0	0.0	0.0
17.2902	0	0.0	0.0
18.9902		0.0	100.0
TOTAL	8	6	2

TABLE 8

RELATEDNESS OF EMPLOYMENT AT THE TIME OF THE SURVEY
TO OCCUPATIONAL TRAINING BY PROGRAM TAKEN*

Program Sample		Percentage Who Were Found In A				
Taken	Size	Non-Related Job	Related Job	Closely Related Job		
04.0000	7	100.0	0.0	0.0		
07 <b>.09</b> 00	5	20.0	60,0	0.0		
14.0000	1	100.0	0.0	0.0		
14.0101	6	83.3	16.7	0.0		
14.0702	7	14.3	0.0	85.7		
14.0901	1	0.0	100.0	0.0		
17.0000	8	87.5	0.0	12.5		
17.0300	1	100.0	0.0	0.0		
17.1300	3	100.0	0.0	0.0		
17.1500	3	66.7	33.3	0.0		
17.1900	?	50.0	50.3	2.0		
17.2304	1	100.0	0.0	0.0		
17.2902	ů.	0.0	0.0	0.0		
18.9902	4	100.0	0.0	0.0		
TOTAL	49	34	8	7		



Question: If you are not working in a job for which you were trained in high school, check the reason why.

TABLE 9

REASONS FOR EMPLOYMENT IN JOB NOT RELATED TO HIGH SCHOOL OCCUPATIONAL TRAINING BY PROGRAM TAKEN*

Other**	25.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-
No Chance for Promotion	000000000000000000000000000000000000000	-1
Needed More Training; Couldn't Get it	25.000000000000000000000000000000000000	4
Didn't Like Jobs for Which Trained	100.0 100.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	أه
Didn't Know What Job Was Really Like	00000000000000000000000000000000000000	4
Couldn't Earn Enough Money	0.0000000000000000000000000000000000000	•
Couldn't Find Job for Which Trained	25.0 0.0 0.0 25.0 0.0 100.0 33.3 100.0 0.0 0.0 0.0	•
Program Taken	04.0000 07.0900 14.0000 14.0702 14.0901 17.0000 17.1300 17.1300 17.2304 18.9902	

*Reported in Percentages



^{**}Additional reasons specified by respondents checking the "other" category immediately follow this table

## TABLE 9 "Other" Responses

Other reasons, specified by respondents, for not working in a job for which trained in high school. (Phrasing and spelling used by respondents was not corrected.)

14.0101 "Advanced study in accounting."

14.0702 "in college-only needed job for 2 mos."

"I took this job while it was at hand, I would love another job where shorthand is necessary."

17.0000 "part time to earn money."

"I wasn't trained for any job, in the occupational training class that I took"

"laid off"

17.1300 "Still attending school."

"This is starting from the bottom of machine design and is a great help toward my field. Also I'm a student now."

17.1500 "Needed a summer time job to get me through college."

17.1900 "Attending School"

18.9902 "Continuing training"

"No insurance"



D.O.T. CLASSIFICATION* OF JOBS EMPLOYED RESPONDENTS
HELD AT THE TIME OF THE SURVEY

Job	Number	Percent	Job Humber	Percent
D.O.T.	in	in	D.O.T. in	in
Code	Job	Job	Code J <b>o</b> b	Job
001.281 079.368 142.081 201.368 202.388 203.588 206.388 209.388 211.368 213.582 215.388 219.388 222.387 237.368 290.468 311.878 355.878 379.368	1 1 1 1 4 2 6 1 4 1 3 2 1 2 4 5 1	1.4 1.4 1.4 15.3 1.4 5.6 2.8 8.3 1.4 5.6 1.4 4.2 2.8 1.4 2.8 1.4	381.887 2 401.137 1 500.884 1 504.782 1 600.280 1 651.782 1 724.781 1 741.884 2 820.381 1 822.381 1 859.884 1 860.381 1 861.381 1 866.381 1 866.381 1 869.884 1 915.137 1 915.867 1 972.381 1	2.8 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4

^{*}Appendix A contains the Job Titles of each D.O.T. Code and the instructional program that the U.S. Office of Education considers appropriate for training personnel for entry level into the specified job.



Question: How do you feel about this job?

TABLE 11

SATISFACTION WITH JOB HELD AT THE TIME OF THE SURVEY BY PROGRAM TAKEN

Program Taken	Sample Size	I like it very much	I like it	It's OK	Not what I'd hoped	It's Awful
04.0000	7	28.6	42.9	14.3	14.3	0.0
07.0900	5	60.0	20.0	20.0	0.0	0.0
14.0000	12	41.7	50.0	8.3	0.0	0.0
14.0101	6	50.0	16.7	33.3	C. O	0.0
14.0702	7	71.4	0.0	28.6	0.0	0.0
14.0901	1	0.0	100.0	0.0	0.0	0.0
17.0000	14	42.9	42.9	14.3	0.0	0.0
17.0300	1	0.0	0.0	100.0	0.0	0.0
17.1300	3	56.7	0.0	0.0	33.3	0.0
17.1500	3	0.0	33.3	66.7	0.0	0.0
17.1900	2	50.0	50.0	0.0	0.0	0.0
17.2304	1	0.0	100.0	0.0	0.0	0.0
17.2 <del>9</del> 02	0	0.0	0.0	0.0	0.0	0.0
18.9902	8	62.5	12.5	25.0		0.0
TOTAL	70	3?	22	14	2	0



Question: Check the box before the ONE THING YOU LIKE MOST about your job.

FACTORS ASSOCIATED WITH JOB SATISFACTION TABLE 12

	io th'i ng		0.0													0
	Everything	60.0	50.0			2.99				33.3	0.0		0.0	0.0	28.6	27
ages)	Employer	0	0	c	c	0	0	0	.01	0	0	0.01		•	0	0
(In Percentages	Eellow Workers		0.0									0.0		•	-	2
	Meeting People	0.0	0.0	9.1	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
One Thing Liked Most About Job	Possibilities for Advancement	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Most /	Security of dob	0.0	0.0	9.1	0.0	16.7	0.0	16.7	0.0	33.3	50.0	0.0	0.0	0.0	28.6	8
Liked	synoH 94T		0.0													2
One Thin	Mature of the	0	25.0	•	16.7	16.7	0.0	25.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	7
	Pleasant Job Duties	0.0	0.0									0				8
	Good Pay		0.0	7°6	0.0	0.0	0.001	φ (γ		33.3	50.0	0.0			28.6	80
	Sample Siz <b>e</b>	ر. د	*	I .	۰ ي	9	(	71		<b>n</b> (	7	7	<b>5</b> (	) i		99
																TOTAL
	Program Taken	04.0000	07.0900	14.0000	14.0101	14.0702	14.0901	17.0000	17.0300	17.1300	17.1500	17.1900	17.2304	17.2902	18.9902	1



Question: Check the box before the ONE THING YOU DISLIKE MOST about your job.

TABLE 13
FACTORS ASSOCIATED WITH JOB DISSATISFACTION

				One Thing	ng Disl	Disliked Most	st About	ut Job	(In Perc	Percentages)	
Program Taken	Sample Size	Гом Рау	Unpleasant Job Duties	Wature of the Work	The hours	Some Customers, Patients, etc.	EGJJON MOLKGLZ	ssog əu <u>r</u>	Seitifidisson oN for the same of the same	Working Conditions No Dislikes	Dislike Dislike
04.0000	9	0.0	16.7	6		•	•			.0 66.	
0050.70	ر ا	•		0		•				0	
14.0000	13	•	•	•		•	•	•	•	.69 0.	
14.0101	9	• •	• ]	•		•	•	•		33	
14.0702	<b>9</b>	•	•	•						99 0°	
14.0901	-	Ö	•	•		•	•	•		.0100,	
0000.71	13	• •	• [	•		•	•		•	.7 46	
17.0300	<b>~</b>	-	•				0			0	
17.1300	m (	•	•	•		•	•	•	•	•0 66.	
0061.7	m	91		•		•			•	0 0.	
0061.71	2	•	•	•		•	•	•		.0100	
17.2304		•	•	0.0	0.0	0.0	0.0	0.0	0.0	0.0100.0	0.0
17.2902	0	• •	c	•		•	•	•	•	0.0	
18.390	<b>80</b>	•	•	•		•	•	•		05 0°	
TOTAL	6.8	6	<b>o</b> o	•	0	m	-	-	-	4 35	0



Question: In addition to your own personal interest, who encouraged you most to enroll in this occupational program? (Check only one.)

TABLE 14

SOURCE OF ENCOURAGEMENT TO ENROLL IN OCCUPATIONAL TRAINING
BY PROGRAM TAKEN*

Program	Parent(s) or Other	Guidance Counselor or		Alumnus of the			
Taken	Family	Administrator	Teacher	Program	Friend	No One	0ther
04.0000	12.5	37.5	(.0	25.0	12.5	12.5	0.0
07.0900	50.0	12.5	0.0	0.0	12.5	25.0	0.0
14.0000	14.3	14.3	14.3	0.0	7.1	50.0	0.0
14.0101	16.7	0.0	0.0	0.0	33.3	50.0	0.0
14.0702	28.6	0.0	28.6	14.3	14.3	14.3	0.0
14.0901	0.0	0.0	0.0	0.0	0.0	100.0	0.0
17.0000	20.0	20.0	6.7	13.3	13.3	26.7	0.0
17.0300	0.0	100.0	0.0	0.0	0.0	0.0	0.0
17.1300	0.0	50.0	50.0	$\overline{\mathbf{c.o}}$	0.0	0.0	0.0
17.1500	0.0	33.3	0.0	33.3	0.0	33.3	0.0
17.1900	33.3	0.0	66.7	0.0	0.0	0.0	0.0
17.2304	0.0	0.0	0.0	0.0	0.0	100.0	0.0
17.2902	0.0	0.0	100.0	0.0	0.0	0.0	0.0
18.9902	27.3	36.4	18.2	9.1	0.0	9.1	0.0
	17	17	11	7	8	22	Ü

Question: Would you recommend this occupational program to others?

TABLE 15

PERCENTAGE OF RESPONDENTS WHO WOULD RECOMMEND OCCUPATIONAL TRAINING TO OTHERS BY PROGRAM TALL'N

Program Taken	Sample Size	Percent Who Would Recommend	Percent Who Would Not Recommend
04.0000	9	88.9	11.1
07.0900	8	100.0	0.0
14.0000	15	100.0	0.0
14.0101	6	100.0	0.0
14.0702	8	100.0	0.0
14.0901	· 1	100.0	0.0
17.0000	16	81.3	18.8
17.0300	· 2	100.0	0.0
17.1300	2	100.0	0.0
17.1500	3	100.0	9. 0
17.1900	3	100.0	0.0
17.2304	1	100.0	0.0
17.2902	1	100.0	<b>9.</b> 0
18. <b>99</b> 02	12	100.0	0.0
TOTAL	87	83	4



Question: What would improve the occupational training you received in high school?

TABLE 16

RESPONDENT'S RECOMMENDATIONS FOR OCCUPATIONAL TRAINING BY PROGRAM TAKEN

*redt0						0.0	•			<u>ي.</u>	•		•	•	4
.babaan sinamavorqmi oM	2.	-	•			0.0		•							15
Greater variety of classroom activities.	0.0	0.0	13.3	0.0	5	0.0	-	ċ	50.0	0.0	0.0	100.0	ö	25.0	15
Training needs to be more like a real job.	2		•	o		100.0	9	ö	•	•	c	•	0	•	19
Teachers should know more about the jobs they teach.						0.0	•	ċ	•	•		•	•	•	5
Greater choice of programs.	11.1	22.2	6.7	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	100.0	0.0	25.0	6
Training should prepare you for one specification.						0.0	•	•	•	•	•		•	<b>6</b> 0.	2
Training should prepare you for several jobs.	~	-	ċ	-		0.0	4	ċ		•	•	•	•	•	22
More help with knowing how and school.	m	11.	ø			0.0									13
about kinds of jobs, high school courses, post-high school training.	0°0	4:4	26.7	16.7	25.0	100.0	33.3	100.0	0.0	50.0	33.3	0.0	0,0	41.7	28
Training should include: Getting exams; Union; Dress, Etc. exams; Union; Dress, Etc. More individual help in learning	11.1	33,3	26.7	33.3	12.5	0.0	11.1	0.0	0.0	0.0	33.3	0.0	0.0	16.7	16
Sample Size	6	6	15	9	∞		18	<b>~</b>	4	4	<b>C</b>		~	71	96
Program Taken	04,0000	005.000	14.0000	14.0101	14.0702	14.0901	17.0000	17.0300	17.1300	17.1500	17.1900	17.2304	17.2902	18.9902	TOTAL

## TABLE 16 "Other Responses

Other recommendations, specified by respondents, to improve the occupational training received in high school. (Phrasing and spelling used by respondents was not corrected.)

- 04.0000 "To me that classroom was a waste of time. It didn't teach me how to do the things that were necessary for my job. The teacher was a bad teacher, all he made us to was work on displays. How many kids in that class worked with displays--hardly any if any. The only thing, I like about it was I could get out of school to go to work."
- 14.0000 "1. More typing
  2. using old machines in 0.0. class of 2 hr.
  - more understanding of vocabulary"

"I had Mrs. for my teacher and I feel she was a very good teacher. She kept you interested and you learned more that way. I feel she was the one that helped me the most."

- "I have a comment about Part III, number 20, Item 7, My teacher at cannot be beat. She is the most wonderful teacher alive. Everyone dislikes her except a few.Many of my friends that were in my Secr. Practice Class were along with me the ones who dearly love her. She is definately strict, but when credit is due, complements are given. I passed two minutes of my 150 word transcription and it would not have been possible for me to work so high so fast, had it not been for her splendid teaching. I was 2nd best in the class at transcribing. One girl ahead of me passed 3 minutes @150 words per minute and as I stated above I passed 2 minutes. I don't think there's a teacher in the world that's as good at teaching Sec. Prac. as she is."
- "They should be able to get you a job that interests you. Employers that might hire you (according to others that did get jobs) just have you do the dirty work, you dont' really get any kind of training that once you are out of school will get you a job. It is all really a mistake, to get in the program. From what I've found kids are mostly in the program to get out of school more, and make money! It wasn't that way in my case, I didn't care about the money. I was really interested in a couple of occupations which might have led to schooling if I found I was really interested in that area of work. I was really disappointed!"
- "I sure did like the course I took in drafting & that is what I want to get into but haven't had any luck yet. I have my application in at If you could be of any help to me getting a job, I sure would appreciate it very much."



## TABLE 16 "Other" Responses

- "I think that more emphasis needs to be put on Technical Schools and much less on college. I have found that many people who have attended college are unorinted for working in many jobs, they have unrealistic approaches to solving tasks and problems. While people who have acquired their training on the job or through technical schools are much better off in their job knowledge and working habits."
- "Although I had a 2 hour course I feel that this was still not enough time per day for the student to start & finish projects With other subjects to study he has a tendency to lose interest or forget the importance of that day's class."

"I'm in school at Lake Land College right now but they didn't have Grafic arts at this school so I switched to an accounting major, but if there is still a chance of getting a break in the photography line of work I would be pleased to here about it."

18.9902 "Learning students to accept responsabilitys and to get what they can out of school will they are there because they can use it when they are on there own."



Question: In general, how much help was your high school occupational training in: (Score indicates average on a four point scale: 1 = None; 2 = Little; 3 = Some; 4 = Much)

TABLE 17
ALUMNI RATINGS OF TRAINING CONTRIBUTION TO EMPLOYMENT BY PROGRAM AREAS

			Program	n Area:	 S		
	Agri-	Bus.	Hith.	Ind.	P&PS	Spec.	•
Aspects of Employment	Bus.	Occ.	Occ.	Occ.	Occ.	Prog.	Total
KNOWING HOW TO USE TOOLS AND EQUIPMENT ON THE JOB	0.0	3.55	3.25	2.62	4.00	2.14	3.09
KNOWING WHAT TO DO IN THIS KIND OF JOB	0.0	3.03	3.50	2.68	4.00	2.56	2.93
USING TIME & ENERGY	0.0	3.36	3.38	2.73	4.00	2.67	3.11
FINDING NEEDED INFORMATION	0.0	3.26	3.38	2.48	4.00	2.89	3∙0∪
REING ARLE TO TALK TO THE ROSS ABOUT JOB PROBLEMS	0.0	2.89	3.00	2.22	4.00	3.11	2.74
GETTING ALONG WITH CUSTOMER, PATIENT, ETC	0.0	3.06	3.88	2.27	3.00	2.89	2.89
GETTING ALONG WITH OTHER WORKERS	0.6	3.43	3.13	2.77	4.00	3.30	3.21
UNDERSTANDING UNION MEMBERSHIP	0.0	1.59	1.83	1.41	0.0	2.11	1.65
HANDLING NEW OR UN- PLEASANT SITUATIONS	0.0	3.11	3.38	2,30	1.00	2.50	2.80
APPLYING FOR A JOB	0.0	3.33	3.63	2.57	4.00	3.20	3.13
INTERVIEWING FOR A	0.0	3.43	3.63	2.48	4.00	3,30	3.16
NUMBER RESPONDING	0	38	8	23	1	10	80





Question: Check the box before the one thing that was hardest for you to lea n when you firs began working on the job.

TABLE 18

MOST DIFFICULT ADJUSTMENTS IN INITIAL EMPLOYMENT BY PROGRAM TAKEN

*ո <del>ց</del> ուհ		•		•	• (					•				0.0	٣
Everything														1 0 1	7
guidioN	28.6													0.0	3.8
Vitneioiffe efficiently was enticiens M							6.7		•	_				•	•
Making decisions							13.3	•	•		•		•	22.2	60
Patience, courtesy, fortion-les, switsitini	} •		, •		•		13,3	•	•				•	•	m
Working with fellow workers	l a				•	•	0.0	•			•	•		•	0
Getting along with the public (patients, customers, etc.)		•	•	•	•	٠.	0.0	۰	•	•	• (	•	•	•	8
pəəds		•			•	`•	0.0	•	•	•		. •	100.0	11.1	9
Performing certain job tasks	14.3	0.0	•	•	•		6.7	٥.	•	•	•	•	•	•	01
Learning the layout, routine, how machines operate, job terminology, etc.	28.6	14.3	7.1				26.7			100.0	0.0	•	•	33, 3	8
Sample Size	7	~	14	9	œ	<b>اسم</b> ا	15	<b></b> (	7	2	<b>~</b>		proof '	6	76
Program Taken	04.0000	00.000	14.0000	14.0101	14.0702	14.0901	17.0960	17.0300	17.1300	17.1500	17.1900	17.2304	17.2902	18.9902	TUTAL

## TABLE 18 "Other" Responses

Other tasks, specified by respondents, that were the one thing hardest to learn when first beginning work on the job. (Phrasing and spelling used by respondents was not corrected.)

- 04,0000 "I had had little experience as a mason before; until I got into the hang of things."
- 14.0901 "Learning how my department worked along with the others."
- 17.0000 "Getting adjusted to a job situation after only being a student. No real problem."



Question: In the following aspects of employment, how well prepared was the employee named above for the job for which hired? (Score indicates average on a 4 point scale: l= Not at all; 2=Poorly; 3=Somewhat; and 4=Well)

TABLE 19
EMPLOYER/SUPERVISOR RATINGS OF EMPLOYEE READINESS FOR EMPLOYMENT

Aspects of Employment	Average Rating	Percent Who Indicated Does Not Apply
Job know-how, application of technical knowledge and skill	3.40	8.1
Use of tools and equipment	3.62	12.7
Selection and care of space, materials, and supplies	3.59	19.0
Quality of work, ability to meet quality demands	3.68	0.0
Quantity of work, output of satisfactory amount	3.71	1.6
Cooperativeness, ability to work with others	3.83	0.0
Accepting advice and supervision	3.79	0.0
Dependability, thorough completion of a job without supervision	3.56	3.2
Initiative, doing jobs that need doing	3.44	1.6
Attendance, reporting for work regularly	3.79	0.0
Appearance, presenting a business image	3.67	6.5
Adaptable to new situations	3.61	1.6
Being able to talk to the boss about job related problems	3.46	0.0
Serving the public, patient, etc.	3.59	27.0
Safety habits, minimizing chance for accidents	3.65	21.0



Question: How would you rate the suitability of the employee named above for the kind of job held?

TABLE 20

EMPLOYEE SUITABILITY FOR THE JOB HELD ACCORDING TO EMPLOYER/SUPERVISORS

Suitability	Percent of Employees
Exceptionally able	30.6
Well suited for job held	45.2
Acceptable	19.4
Poorly suited for job held	03.2
Not at all suited for job held	01.6

Additional Employer Comments by Program Number

"Most recent high school graduates seem to have difficulty adapting to the idea they must go to work each day even if they don't feel up to par in the morning. As a group, the 18 to 21 year olds have the poorest attendance record and blame it on being sick. This is particularly true of the girls. The longer they are on the same job the better their attendance. Almost every business uses Data Processing to some extent yet new employees entering the work force fail to even know the basics of this important part of business. The time spent by the student learning shorthand, which is a dying art, could be used to learn basic Data Processing. More Business and Economic courses would be very helpful in understanding the overall function of business."

"Our company has more opportunity for those with typing ability. Our minimum acceptable typing score is 40 wam. We have limited opportunities for clerical without skills. Shorthand is used some, however, the longer percentage of our supervisors use dictaphone."

"High school occupational training is great as long as the training keeps up with the changing business world. These young employees are very impressive."

14.0900 "Employee worked 1 month then quit because of personal problems."

17.0000 "---is no longer with us. She never came to work and I had to find someone to replace her."

18.9902 "Bus. appearance really not required but nice to have for all employees."



Question: Below is a list of personal qualities and job skills. Check the box before the three you consider most important for a person entering the job held by the previously named employee.

TABLE 21

IMPORTANT ENTRY SKILLS IDENTIFIED BY EMPLOYER/SUPERVISORS

Entry Skills	Percent of Times Identified*
Ability to get along with othersother workers, customers, patients	51.6
Initiative	17.2
Positive attitude toward work	37.5
Appearance and grooming	07.8
Judgmentability to make decisions, ability to plan and organize	31.3
Competency in using job tools, machines, and materials	15.6
Dependability	35.9
Accuracy, quality, and thoroughness	56.3
Attendance and punctuality	21.9
Work quantity	14.1
Other	03.1

^{*}Will not total 100 percent as each respondent could check three. Percent is based upon the number of total respondents who check a particular skill.

