

THE ENROLLMENT RATES, DROPOUT RATES AND ECONOMIC
BENEFITS THAT CHARACTERIZE THE EXPERIENCE
OF THE DISADVANTAGED IN OKLAHOMA'S
OCCUPATIONAL TRAINING

BY

JAMES LEE HARRIS

Bachelor of Science
Oklahoma State University
Stillwater, Oklahoma
1961

Master of Science
Oklahoma State University
Stillwater, Oklahoma
1968

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
DOCTOR OF EDUCATION
May, 1970

OKLAHOMA
STATE UNIVERSITY
LIBRARY
OCT 12 1970

THE ENROLLMENT RATES, DROPOUT RATES AND ECONOMIC
BENEFITS THAT CHARACTERIZE THE EXPERIENCE
OF THE DISADVANTAGED IN OKLAHOMA'S
OCCUPATIONAL TRAINING

Thesis Approved:

Thesis Adviser

William W. Stevenson

John C. Shears

D. Durban

Dean of the Graduate College

762338

ACKNOWLEDGEMENTS

The study was completed only through the cooperation, guidance and assistance of many persons. I wish to express my appreciation to the people who made this project a reality.

Sincere appreciation is expressed to the members of my advisory committee: Dr. Paul Braden, Chairman, who conceived the project, encouraged me when I needed it and whose guidance and assistance in all stages of development were essential to a successful conclusion; Dr. William Stevenson who provided encouragement, understanding and assistance throughout the project; and Dr. John Shearer whose recommendations at the beginning and assistance at the termination of the project made it a better study.

Dr. Donald Frazier, Dr. Dave Stevens and Dr. Charles Hopkins although not officially on my Doctoral committee, contributed ideas, encouragement and assistance during the writing process. These individuals gave their time in a spirit of cooperation which was a source of inspiration.

Dr. Francis Tuttle and his staff at the State Department of Vocational and Technical Education provided data without which this study would not have been possible.

Special recognition is given to Marie Light and Judy Lacy for their efforts in typing both the rough draft and final copy of this study.

This acknowledgement would be incomplete without recognition of the sustaining patience and sacrifices of my wife, Barbara, and my two children Susan Marie and James Lee Jr.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
The Problem	1
Purpose of the Study	2
Need for the Study	2
Statement of the Problem	4
Assumptions	4
Limitations of the Study	4
Hypotheses to be Tested	5
II. REVIEW OF LITERATURE	8
Introduction	8
Definitions	8
The Culturally Disadvantaged	19
The Economically Disadvantaged	20
The Physically Handicapped	22
Occupational Training in Oklahoma	23
III. PROCEDURES	28
Introduction	28
The Populations	28
The Samples	29
Instruments	30
Data Collection	33
Analysis of Bias	34
Statistical Tools	35
Analysis Procedures	36
Summary	40
IV. ANALYSIS	43
Introduction	43
Disposition of Hypothesis 1	43
Disposition of Hypothesis 2	46
Disposition of Hypothesis 3	49
Disposition of Sub-Hypothesis 1	51
Disposition of Sub-Hypothesis 2	52
Disposition of Sub-Hypothesis 3	53
Disposition of Sub-Hypothesis 4	56
Disposition of Sub-Hypothesis 5	56
Disposition of Sub-Hypothesis 6	56

Chapter	Page
Disposition of Sub-Hypothesis 7	57
Disposition of Sub-Hypothesis 8	57
Disposition of Sub-Hypothesis 9	58
Additional Findings	59
 V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.	 68
Summary of Findings	68
Conclusions	70
Recommendations	73
 A SELECTED BIBLIOGRAPHY	 75
 APPENDIX A - OTIS FORM 2	 78
 APPENDIX B - OTIS FOLLOW-UP QUESTIONNAIRE 1.	 81
 APPENDIX C - OTIS FOLLOW-UP QUESTIONNAIRE 2.	 84
 APPENDIX D - OTIS FOLLOW-UP QUESTIONNAIRE 3.	 87
 APPENDIX E - RCU FOLLOW-UP CARD.	 90

LIST OF TABLES

Table	Page
I. Relationships Between Population Sizes and Sample Sizes . . .	30
II. A Comparison of the Sample of Occupational Training Students Who Completed OTIS Form 2 with the Population of Occupational Training Students by Service Division	31
III. The Culturally Disadvantaged by Enrollment in Occupational Training and by State Population	44
IV. The Economically Disadvantaged by Enrollment in Occupational Training and by State Population	45
V. The Physically Handicapped by Enrollment in Occupational Training and by School Population	45
VI. Disadvantaged Dropouts Versus Non-Disadvantaged Dropouts	46
VII. Black Dropouts Versus Non-Black Dropouts	47
VIII. Indian Dropouts Versus Non-Indian Dropouts	48
IX. Economically Disadvantaged Dropouts Versus Non-Economically Disadvantaged Dropouts	49
X. Physically Handicapped Dropouts Versus Non-Physically Handicapped Dropouts	49
XI. Beginning Salaries of Disadvantaged Graduates Versus Beginning Salaries of Non-Disadvantaged Graduates	50
XII. Employment of Disadvantaged Graduates Versus Employment of Non-Disadvantaged Graduates	51
XIII. Culturally Disadvantaged Students Enrolled in Occupational Training in the SMSA Counties Versus Culturally Disadvantaged Students in the Non-SMSA Counties	52
XIV. Disadvantaged Students in Post-High School Occupational Training Versus Disadvantaged Students in Secondary Occupational Training	53

Table	Page
XV. Enrollments of the Disadvantaged by Selected Program Type	54
XVI. Disadvantaged Dropouts by Program Type	55
XVII. Program Evaluation of Disadvantaged Graduates Versus Program Evaluation of Non-Disadvantaged Graduates . . .	57
XVIII. Salaries of Graduates Who Received Employment in Related Fields Versus Salaries of Graduates Who Received Employment in Non-Related Fields	58
XIX. Graduates' Salaries by Selected Program Type	60
XX. Employment of Those Graduates Available For Placement in Related Fields by Selected Program Type	61
XXI. Disadvantaged as a Percent of Total First Year Enrollment by Service Division	62
XXII. Yearly Dropout of Disadvantaged Students by Service Division	64
XXIII. Percent of Graduates Who are Disadvantaged by Service Division	65
XXIV. Economic Benefits by Service Division	66

CHAPTER I

INTRODUCTION

The Problem

Since World War II, America's society has become highly technical; relative to the composition of the entire labor force, the need for unskilled labor is rapidly decreasing and blue collar jobs of all types are decreasing in number and importance as a source of new employment.¹ Many people, without special knowledge or skills, will have difficulty entering the mainstream of employment in this restructured society.

Some Americans, for various reasons, are finding it difficult to acquire sufficient knowledge or skills for employment. Included in this population are persons who are physically handicapped, culturally or economically disadvantaged or have a combination of these problems. In this study, these people are identified as the disadvantaged. (Note: See pages 10, 11, 12 and 15 for a formal definition of the disadvantaged used in this study).

Occupational training for the disadvantaged presents special problems to the educator. He has little information regarding enrollment rates, dropout rates, and economic benefits of training relative to the disadvantaged. He must often make decisions without sufficient background data.²

Purpose of the Study

The purpose of this study is to provide information to occupational educators in Oklahoma on some of the needs of disadvantaged students. To accomplish the purpose, this investigation analyzes and interprets data which was collected by the Occupational Training Information System (hereafter may be referred to as OTIS) in Oklahoma in 1968-1969³ and by the Oklahoma Research Coordinating Unit (RCU) in the Fall of 1969. OTIS, developed by Oklahoma State University for the Oklahoma State Department of Vocational and Technical Education, is one of the few data banks in the United States to possess the quality and quantity of information needed for a study of this type. Additional data collected by the RCU increases the potential of this investigation.

Items of special interest in the investigation are:

1. First year enrollment rates of the disadvantaged in various types of occupational training,
2. Dropout rates of the disadvantaged in various types of occupational training, and
3. Economic benefits derived by the disadvantaged student from various types of occupational training.

Need for the Study

The improvement of the social and economic conditions of the disadvantaged has been a major domestic issue during the last decade. During the Johnson administration and the early months of the Nixon administration there has been a continuing emphasis on occupational training as part of the solution to this problem; e.g. legislation passed during

this period provides specific funds for the training of the disadvantaged.⁴

To derive maximum benefit from these funds, occupational educators need to know which types of training appeal to the disadvantaged (as determined by first year enrollment rates), in which types of training the disadvantaged have the lowest dropout rates and from which types of training the disadvantaged receive the greatest economic benefits.

During an interview at the United States Office of Education⁵, it was learned that:

1. the Office of Education has not collected information on the participation rates of the disadvantaged in occupational training on a large scale,
2. the Office of Education has not collected information on the dropout rates of the disadvantaged in occupational training on a large scale,
3. the Office of Education has not collected information on the benefits derived from occupational training by the disadvantaged on a large scale,
4. the Office of Education plans to collect this type of information on a large scale in the future, and
5. the 1968 Vocational Education Amendments provide funds for the collection of this type of data.

During the interim between the enactment of legislation providing funds for the training of the disadvantaged and the establishment of guidelines for the use of these funds, this study will provide needed information on the disadvantaged to the Oklahoma Department of Vocational-Technical Education, in particular, and all occupational educators in general.

Statement of the Problem

As was indicated earlier, occupational educators are forced to make decisions regarding programs for the disadvantaged based on insufficient data. It is imperative that better data be provided. This investigation attempts to answer the question, "What has been the experience of disadvantaged students in the occupational training programs of Oklahoma during the 1968-69 school year and in initial attempts to find employment immediately after graduation?"

Assumptions

The analysis and interpretation of data done in this study is based on the following assumptions.

1. The disadvantaged students in Oklahoma occupational training have enrolled in the programs that most appeal to them relative to those programs available.
2. Part of the success of a program depends on keeping the dropout rate as low as possible. (Note: The rate may change with labor market conditions.)
3. Receiving employment in the occupation for which trained is an indicator of economic benefit derived from occupational training.

Limitations of the Study

The following are limitations of this investigation:

1. The study concentrates on the disadvantaged students in full-time public-school occupational training in Oklahoma. Adult programs, MDTA programs, private school programs and many other

types of training programs have not been included in the investigation.

2. Only programs with the largest enrollments in each service area are examined in detail. For example, only production agriculture programs are examined in detail in the agriculture service division. Other programs are covered in aggregate within an entire service division.
3. Only the physically, culturally and economically disadvantaged are treated in this investigation.
4. This study is cross-sectional rather than longitudinal because of limited time.

Hypotheses to be Tested

Major Hypotheses of the Study

Hypothesis 1. There are significant differences between the enrollment rates of the disadvantaged and the non-disadvantaged in occupational training.

Hypothesis 2. There is a significant difference between dropout rates of disadvantaged students and non-disadvantaged students in occupational training.

Hypothesis 3. There are significant differences between the economic benefits received by disadvantaged graduates of occupational training and non-disadvantaged graduates of occupational training.

Sub-Hypotheses of the Study

Sub-Hypothesis 1. There is a significant difference between the proportion of culturally disadvantaged occupational students in the SMSA counties and the proportion of culturally disadvantaged occupational students in non-SMSA counties.

Sub-Hypothesis 2. There is a significant difference between the proportion of disadvantaged students in secondary occupational training programs and the proportion of disadvantaged students in post-high school occupational training programs.

Sub-Hypothesis 3. There are significant differences between the enrollment rates of disadvantaged occupational students in different program types.

Sub-Hypothesis 4. There is a significant difference between the dropout rates of disadvantaged occupational students in different program types.

Sub-Hypothesis 5. There is a significant difference between the subsequent employment received by disadvantaged graduates and non-disadvantaged graduates of occupational training.

Sub-Hypothesis 6. There is a significant difference between beginning salaries of disadvantaged graduates and non-disadvantaged graduates of occupational training.

Sub-Hypothesis 7. There is a difference between disadvantaged graduates' evaluation of their occupational training in terms of employment benefits and non-disadvantaged graduates' evaluation.

Sub-Hypothesis 8. There is a significant difference between the beginning salaries of graduates who receive employment in related field and graduates who receive employment in other fields.

Sub-Hypothesis 9. There are significant differences between the economic benefits received from different program types.

FOOTNOTES

¹Report of the National Advisory Commission on Civil Disorders, New York Times, New York, New York, 1968, p. 278.

²From an interview with Dr. Francis Tuttle, State Director of Vocational and Technical Education, Stillwater, Oklahoma, on December 1, 1969.

³The Occupational Training Information System was developed under the direction of Dr. Paul V. Braden at Oklahoma State University to examine manpower demand and supply in Oklahoma in a systematic and continuous manner. The Manpower Research and Training Center at Oklahoma State University and the Oklahoma Research Coordinating Unit are two of the organizations which are contributing consulting time to this project. The Department of Labor contract number is 81-38-69-10.

⁴An example is the Vocational Education Amendment Act of 1968.

⁵From an interview with Barbara Kemp, Specialist on the Disadvantaged, and Bernard Micheal, Program Evaluation Officer, in Washington, D. C. at the Office of Education on July 29, 1969.

CHAPTER II

REVIEW OF LITERATURE

Introduction

This chapter is concerned with the background literature that identifies, explains or expands key concepts used in this study.

Definitions

Agriculture Production Programs

General Definition - Subject matter and learning activities which are concerned with the principles and processes involved in the planning related to and the economic use of facilities, land, machinery, chemicals, finance and labor in the production of plant and animal products.¹

Operational Definition - Programs given a 010100 program code by the Oklahoma State Department of Vocational and Technical Education.

Agriculture Programs

General Definition - Agriculture is comprised of the group of related courses or units of subject matter which are organized for carrying out learning experiences concerned with developing knowledges, understandings and skills involved in preparation for or upgrading in occupations requiring knowledges and skills in

agriculture subjects.²

Operational Definition - Programs given the 01 service area code by the Oklahoma State Department of Vocational and Technical Education.

Auto Mechanics Program

General Definition - Learning experiences concerned with the components of the vehicle, including engine, power transmission, steering, brakes, and electrical systems.³

Operational Definition - Programs given the 170302 program code by the Oklahoma State Department of Vocational and Technical Education.

Beginning Salaries

General Definition - Salaries received by occupational training graduates when first entering employment (within five months after graduation).

Operational Definition - The salary range checked by graduates on one of the three Follow-up Instruments. (Note: For this study, salaries are grouped into: under \$3,000.00, \$3,000.00 to \$4,000.00, \$4,001.00 to \$5,000.00 and over \$5,000.00)

Carpentry Programs

General Definition - Classroom and shop experience involving layouts, fabrication, assembly, installation and repair of structural units.⁴

Operational Definition - Programs given the 171001 program code by

the Oklahoma State Department of Vocational and Technical Education.

Cooperative Distributive Programs

General Definition - Combinations of courses and on the job experiences organized into programs of instruction to provide opportunities for pupils to prepare for and achieve objectives in selected distributive occupations.⁵

Operational Definition - Programs given the 140000 program code by the Oklahoma State Department of Vocational and Technical Education.

Culturally Disadvantaged Students

General Definition - Pupils whose cultural background is so different from that of most pupils that they have been identified by professional personnel as needing additional educational opportunities beyond those provided in the usual school program if they are to be educated to the level of their ability.⁷ The National Committee on Employment of Youth states "Most of the population today considered (culturally) disadvantaged are the minority groups - Negroes, Puerto Ricans, Mexican-Americans, Indians, Cuban refugees, Appalachian whites and the nations' poor migrant laborers."⁸

Operational Definition - Students who checked Indian, Negro, Mexican-American, Oriental or Other on the OTIS Form 2 question "Which Describes You?"

Disadvantaged Graduates

General Definition - Students who were identified as disadvantaged students in the fall of 1968 and who graduated from the program in

which they were enrolled during the 1968-69 school year.

Operational Definition - Students who were identified as culturally disadvantaged, economically disadvantaged or physically handicapped on OTIS Form 2 using the operational definitions of these concepts found in this section.

Disadvantaged Students

General Definition - A student who is culturally disadvantaged, economically disadvantaged or physically handicapped as defined in this study. (Note: Physically handicapped is not normally included in the definition of disadvantaged but will be for the purpose of this study)

Operational Definition - Students identified as culturally disadvantaged, economically disadvantaged or physically handicapped.

Distributive Education Programs

General Definition - Distributive education included various combinations of subject matter and learning experiences related to the performance of activities that direct the flow of goods and services, including their proper utilization, from producer to consumer or user.⁹

Operational Definition - Programs given the 04 service area code by the Oklahoma State Department of Vocational and Technical Education.

Dropout Rate

General Definition - The percentage of students who enroll in a vocational or technical program and do not complete the program.

In this study a yearly dropout rate is used.

Operational Definition - The number of students enrolled in the fall of 1968 (as identified by OTIS Form 2) divided into the number of students from this group who are not in the same program in the fall of 1969 and have not graduated during the interim (as identified on RCU Follow-Up Cards). This gives a per year dropout rate.

Economic Benefits

General Definition - Benefits derived from occupational training, i.e., employment received in an occupation related to the field for which the student is trained and the salary received for such employment.

Operational Definition - The student is said to have received an economic benefit from training if he is employed in an occupation related to the field for which he was trained (answers 1 and 2 on question II of the OTIS Follow-up Instruments). An additional measure of economic benefit is salary received from such training (question IV on the same instruments).

Economically Disadvantaged Students

General Definition - Students from homes with less than three thousand dollars of annual income.¹⁰

Operational Definition - Students who check under \$3,000.00 for family income on the OTIS Form 2.

Electronics Programs

General Definition - Subject matter and laboratory experiences organized to provide preparation in the speciality courses, physical

science, mathematics, and general education concerned with the design, development, modification, and testing of electronic circuits, devices and systems.¹¹

Operational Definition - Programs given the 160108 program code by the Oklahoma State Department of Vocational and Technical Education.

Enrollment Rates

General Definition - The percent of students in a population of students enrolled in vocational or technical programs who are in specific subgroups of that population.

Operational Definition - The percent of Black, Indian, Physically Handicapped, etc. students in a sample of students.

Evaluation of Occupational Training

General Definition - The value a graduate from an occupational training program places on his training in terms of employment benefits.

Operational Definition - The rating the students gives his training on Question 5 of the OTIS Follow-up Instrument.

Health Programs

General Definition - Education for health occupations comprises the body of related subject matter, or the body of related courses, and planned experiences designed to input knowledges and develop understandings and skills required to support the health professions.¹²

Operational Definition - Programs given the 07 service division code by the Oklahoma State Department of Vocational and Technical Education.

Home Economics Programs

General Definition - Home Economics comprises the group of related courses or units of instruction organized for purposes of enabling pupils to acquire knowledges and develop understandings, attitudes and skills relevant to (a) personal, home and family life, and (b) occupational preparation using knowledges and skills of home economics.¹³

Operational Definition - Programs given the 09 service division code by the Oklahoma State Department of Vocational and Technical Education.

Licensed Practical Nurse Programs

General Definition - A combination of subject matter and supervised clinical experiences designed to prepare a person to give direct nursing care under the supervision of a nurse or physician.¹⁴

Operational Definition - A program given the 070302 program code by the Oklahoma State Department of Vocational and Technical Education.

Occupational Training

General Definition - Occupational Training is that training which prepares the student for sub-professional employment. It traditionally includes the following service divisions.¹⁵

- a. Agriculture Education
- b. Distributive Education
- c. Health Education
- d. Office Education

- e. Technical Education
- f. Trade and Industrial Education
- g. Home Economics Education

Operational Definition - Full-time public school training programs supervised by the Oklahoma State Department of Vocational and Technical Education, Oklahoma State University at Okmulgee, Oklahoma State University at Oklahoma City or the Technical Institute at Oklahoma State University, Stillwater.

Occupational Training Students

General Definition - Students enrolled in occupational training programs in the fall of 1968 (both secondary and post-high school).

Operational Definition - Students from whom data was gathered in the fall of 1968 using OTIS Form 2.

Office Education Programs

General Definition - Office Education Programs includes the body of related subject matter, or related courses, and planned learning experiences which are designed to develop in pupils the attitudes, knowledges, skills and understandings concerned with business principles and practices having applications for personal and/or activities in the business world.¹⁶

Operational Definition - Programs given the 14 service division code by the Oklahoma State Department of Vocational and Technical Education.

Physically Handicapped Students

General Definition - Pupils identified by professionally qualified personnel as having one or more physical handicaps, e.g., the blind, the hard of hearing, the speech impaired, and the crippled.¹⁷

Operational Definition - Students who checked 'yes' to the question 'Are You Physically Handicapped' on the OTIS Form 2.

Post-High School Occupational Training

General Definition - Post-High School Occupational Training refers to the general level of instruction provided for pupils in college programs, usually beginning with grade 13, and any instruction of a comparable nature and difficulty provided for adults and out of school youth.¹⁸ In this study, it will refer to grade 13 and 14 programs involved with occupational training.

Operational Definition - Occupational Training in grades 13 and 14.

Post-High School Students

General Definition - Program type refers to nine stratified randomly selected program areas representing all seven service divisions. (Note: Samples were stratified on the basis of service division with only the largest group programs used as the population due to sample sizes) These program areas are (1) Agriculture Production Programs, (2) Cooperative Distributive Programs, (3) Cooperative Office Education Programs, (4) Electronics Programs, (5) Licensed Practical Nurse Programs, (6) Welding Programs, (7) Auto Mechanics Programs and (8) Carpentry Programs

Operational Definition - Programs given 010100, 040100, 070302,

140000, 160108, 172306, 170302 or 171001 program codes by the Oklahoma State Department of Vocational and Technical Education.

Secondary Occupatioanl Training

General Definition - Training received in a secondary school, generally grades 9 through 12 or 10 through 12.¹⁹

Operational Definition - Occupatioanl Training in grades 9 through 12 (Question 21 on OTIS Form 2).

SMSA (Standard Metropolitan Statistical Area)

General Definition - Standard Metropolitan Statistical Area refers to a county or group of counties containing at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. In addition to the county or counties, containing such a city or cities contiguous counties are included in the SMSA if they are essentially metropolitan in character and are socially and economically integrated with the central city or cities.²⁰ In Oklahoma there are three SMSA's i.e. Oklahoma City, Tulsa, and Lawton.

Operational Definition - Counties included in the SMSA's in Oklahoma with the exception of Sequoyah county which is part of the Fort Smith, Arkansas SMSA.

SMSA Counties

General Definition - Counties included in Oklahoma SMSA's.

Operational Definition - Counties coded 55, 72, 09, 14, 19, 16, or 57 by the OTIS staff.

Technical Programs

General Definition - Technical programs are concerned with that body of knowledge organized in a planned sequence of classroom and laboratory experiences, usually at the post-high school level, to prepare pupils for a cluster of jobs in a specialized field of technology.²¹

Operational Definition - Programs given the 16 service division code by the Oklahoma State Department of Vocational and Technical Education.

Trade and Industrial Programs

General Definition - Trade and Industrial Programs is that branch of vocational education which is concerned with preparing persons for initial employment, or for upgrading or retraining workers in a wide range of trade and industrial occupations.²²

Operational Definition - Programs given the 17 service division code by the Oklahoma State Department of Vocational and Technical Education.

Welding Programs

General Definition - Specialized classroom and shop experiences concerned with all types of metal welding, brazing and flame cutting.²³

Operational Definition - Programs given the 172306 program code by the Oklahoma State Department of Vocational and Technical Education.

The Culturally Disadvantaged

The Oklahoma Employment Security Commission reports that, on a statewide basis in 1967, 9.5 percent of the population is culturally disadvantaged (non-white) with 6.6 percent of the population being Black, 2.8 percent being Indian and .1 percent being other than White, Black, or Indian.²⁴

The SMSA counties were reported to have 43.88 percent of the total population while the non-SMSA counties had 56.12 percent. In the SMSA counties, the proportion of culturally disadvantaged was 9.53 percent which could be further broken into 7.76 percent Black, 1.62 percent Indian and .15 percent others. In the non-SMSA counties, the proportion of culturally disadvantaged was 9.42 percent which could be further broken down into 5.65 percent Black, 3.68 percent Indian and .09 percent other.²⁵

In the age range of 14 through 24, the proportion of non-whites involved in educational programs decreases with age.²⁶ In addition, approximately sixty percent of all whites graduate from high school while only forty percent of non-whites graduate.²⁷

Jenks and Riesman indicate that the high school education received by non-whites is substandard as measured by college entrance examinations.²⁸ Similarly, the Department of Labor reports that non-whites often lag behind in verbal and mathematical skills which are normally included in the high school curriculum.²⁹

The Department of Labor also reports that non-whites compared with whites at the same educational level, have a higher unemployment rate,³⁰ are employed in lower level occupations,³¹ and have lower incomes.³²

These three factors indicate that the culturally disadvantaged receive less economic benefit from education than whites.

Findings of the Department of Labor and Sheppard and Striner support this concept. Summarizing the Department of Labor:³³

1. Non-white graduates (high school) do less well than white graduates in getting and keeping a job,
2. they (non-white high school graduates) earn less than white youths who have left school before graduation.
3. non-white youths are preparing for today's jobs faster than existing practices are changing to absorb them and
4. as matters stand now, many non-white youngsters have more education than they need for the jobs they get.

Sheppard and Striner state that:

Negroes are not rewarded for educational improvement through increased incomes to the same degree as whites. Non-whites receive a lower median income at each level of education - and the discrepancy between income medians increases as the level of education increases.³⁴

The circumstances mentioned above influence the attitudes of non-whites about educational opportunities and therefore influence enrollment rates. In Jenks and Riesman's opinions, the Negro prefers to attempt professional training rather than train for subprofessional occupations because the professions can be practiced behind the 'Black Curtain.'³⁵ If this be true, an extension of the theory to the secondary level would indicate that Negroes would prefer educational programs which prepare for college entrance over occupational training.

The Economically Disadvantaged

The Office of Programs for the Disadvantaged (HEW) reported in January of 1969 that of an estimated population of 2,477,000 in

Oklahoma, 679,600 (27 percent) were economically disadvantaged.³⁶

Included in this number were a large group who were receiving financial aid from the state government. Approximately 7.5 percent of all children of school age were receiving welfare, usually in the form of aid to dependent children.³⁷

Both Hyman³⁸ and Egermeier³⁹ indicate the influence of family income on dropout rates. Hyman points out that there is a direct relationship between family income and the value placed on education while Egermeier indicates that income is negatively related to dropout rates.

The National Committee on Employment of Youth indicates that the typical disadvantaged student is much less committed to work as a source of intrinsic satisfaction than is the middle-class high school student or college student. He is more likely to see work as a minimal means of surviving than as something of interest or value. His environment is described as:

The disadvantaged come from substandard housing and broken homes in which there is hunger, malnutrition, unpaid debts, alcoholism or drug addiction. Their overcrowded home conditions do not permit privacy or personal development. Their struggle to live on a low income becomes a matter of survival in which long range planning is discarded for immediate gain. They tend to stay within their immediate environment and thus remain unfamiliar with areas outside their neighborhood. Fearful of the unknown, they need help in getting to appointments in other sections of the city. Their style of living, language, dress and humor is different from that of the middle class. They suffer from poor health and poor health habits. Their funds are too limited to allow them to provide a variety of nutritious foods, and they do not always know what constitutes a proper diet. They have restricted time horizons and often do not have clocks or watches at home. They do not believe most promises made to them, for they have experienced continued disappointment. Many have a profound rage for the way "the system" or "the establishment" has, in their view, abused them. Discrimination and segregation have often resulted in feelings of humiliation, inferiority, self-doubt and self-hatred.⁴⁰

The Physically Handicapped

Bohleber⁴¹ indicates that there were 441,611 people in the Oklahoma population (approximately 20 percent) who were reported to be disabled in 1967. Of these, the vast majority were above the age of 30 while the majority of the population is under the age of 30. In the categories of (1) Visual Defects, (2) Hearing Defects, (3) Functional Impairments and, (4) Absence of Limb or Amputations, there were 187,784 people of which only 20,823 were under the age of 20.

The State Department of Education⁴² reports that of the 572,206 children of school age in Oklahoma in 1967, 1,716 were crippled, 1,430 were blind or had partial sight and 11,444 had hearing defects. This is a total of 14,590. The Bohleber figure was used in this study because it included physically handicapped who were not included in the state figures due to a lack of categorical definitions.

The handicapped student may or may not present an instructional problem in training, depending on the extent of his disability, his acceptance of it, and the group's acceptance of him. There are children in nearly every program whose physical handicaps prevent their profiting fully from the training. It is not easy to determine the extent to which physical handicaps influence occupational opportunities and the benefits received from occupational training. The physical handicap cycle is a vicious one, with the student as the victim unless special programs can be provided to permit equal training opportunities.⁴³

Occupational Training in Oklahoma

Geographic Distribution and Size of Secondary and Post-Secondary Schools

Approximately 25 percent of all schools offering secondary and post-secondary occupational education in Oklahoma are located in the SMSA counties. The secondary schools in SMSA counties are significantly larger than schools located in the non-SMSA counties in terms of average enrollment while the reverse is true for post-high schools.⁴⁴

Geographic Distribution of Occupational Training Programs

The percent of all programs in the seven service divisions which are located in the SMSA counties is:⁴⁵

1. 9 percent of Vocational Agriculture programs,
2. 49 percent of Distributive Education programs,
3. 50 percent of Health programs,
4. 22 percent of Home Economics programs,
5. 41 percent of Office Education programs,
6. 46 percent of Technical Education programs,
7. 42 percent of Trade and Industrial programs, and
8. 30 percent of all occupational programs.

Distribution of Students by Service Division

The Occupational Training Information System⁴⁶ reports that in the fall of 1968, there were 18,142 students in Vocational Agriculture programs, 2,136 students in Distributive Education Programs, 713 students in Health Education programs, 3,382 students in Technical Education programs and 11,586 students in Trade and Industrial programs.

Distribution of Students by Age

The average age of students in the various service divisions was:

1. 15.50 in Vocational Agriculture Education,
2. 16.50 in Distributive Education,
3. 25.77 in Health Education,
4. 15.25 in Home Economics Education,
5. 17.59 in Office Education,
6. 19.12 in Technical Education,
7. 17.09 in Trade and Industrial Education, and
8. 16.64 in all Occupational Education⁴⁷

Distribution of Students by Sex

Males constituted 46.86 percent of all students in Occupational Training with the following percent of males in the service divisions.⁴⁸

1. 98.88 percent of Vocational Agriculture students
2. 52.81 percent of Distributive Education students
3. 2.77 percent of Health students
4. 3.27 percent of Home Economics students
5. 19.57 percent of Office Education students
6. 92.62 percent of Technical Education students
7. 83.68 percent of Trade and Industrial students

FOOTNOTES

¹Putnam and Chismore, Standard Terminology for Curriculum and Instruction in State and Local School Systems, p. 417.

²Ibid., p. 416.

³Ibid., p. 655.

⁴Ibid., p. 660.

⁵Ibid., p. 473.

⁶Ibid., p. 640.

⁷Ibid., p. 181.

⁸National Committee on Employment of Youth, A Guide to the Development of Vocational Education Programs and Services for the Disadvantaged, p. 6.

⁹Putnam and Chismore, p. 467.

¹⁰Tweeten, Rural Poverty: Incidence, Causes and Cures.

¹¹Putnam and Chismore, p. 642.

¹²Ibid. p. 512.

¹³Ibid. p. 541.

¹⁴Ibid. p. 516.

¹⁵Braden, et. al., Occupational Training Information System: Cycle Two Report--A Second Yearly Report Complete With System Documentation, pp xii-xxxiii.

¹⁶Putnam and Chismore, p. 606.

¹⁷Ibid., p. 180.

¹⁸Ibid., p. 199.

¹⁹Ibid., p. 116.

²⁰U.S. Department of Commerce, Census Report, p. 16.

- 21 Putnam and Chismore, p. 638.
- 22 Ibid. p. 653.
- 23 Ibid. p. 671.
- 24 Oklahoma Employment Security Commission, Distribution of Population by Race in Oklahoma.
- 25 Ibid.
- 26 U.S. Department of Labor, Negroes in the United States, p. 24.
- 27 U.S. Department of Labor, Educational Attainment of Workers, p. 28.
- 28 Jencks and Riesman, The Academic Revolution, pp. 423-424.
- 29 U.S. Department of Labor, Finding Jobs for Negroes, p. 8.
- 30 U.S. Department of Labor, Negroes in the United States, p. 20.
- 31 Sheppard and Striner, Civil Rights, Employment, and Social Status of American Negroes, p. 12.
- 32 U.S. Department of Labor, Employment of High School Graduates and Dropouts in 1966, p. 20.
- 33 U.S. Department of Labor, Negroes in the United States, pp. 22-24.
- 34 Sheppard and Striner, p. 24.
- 35 Jencks and Riesman, p. 423.
- 36 U.S. Office of Programs for the Disadvantaged, Vocational Training - Employment and Unemployment: Part II--Profiles of States.
- 37 Department of Public Welfare, Annual Report: 1968-1969, p. 15.
- 38 Hyman, Class, Status and Power.
- 39 Egermeier, Construction and Validation of a College Dropout Prediction Scale for the Minnesota Counseling Inventory.
- 40 National Committee on Employment of Youth, p. 7.
- 41 Bohleber, Disabilities in Oklahoma: Estimates and Projections, p. 13.
- 42 Division of Special Education, A Program of Education for Exceptional Children in Oklahoma, p. 2.
- 43 Ibid, p. 3.
- 44 State Department of Vocational and Technical Education, Personnel Directory.

⁴⁵Ibid.

⁴⁶Braden, et. al., p. 4.

⁴⁷Ibid, p. A-19.

⁴⁸Unpublished OTIS data.

CHAPTER III

PROCEDURES

Introduction

The purpose of this chapter is to describe the procedures and tools used to evaluate the hypotheses and sub-hypotheses presented in Chapter I (see pages 4, 5, and 6). Since this study utilizes data collected by the Occupational Training Information System and the Oklahoma Research Coordinating Unit, the instruments and data collection procedures described here will represent the methods used by these organizations to gather information.

The Populations

There are three populations directly involved in this study. These are the following.

1. The population of occupational training students in full-time public programs in Oklahoma in the 1968-69 school year excluding home economics students. This population consisted of 38,231 students (both post-high school and secondary).
2. The population of first year enrollees in the population described above. This population consists of 22,173 students (both post-high school and secondary).
3. The population of potential graduates (seniors, etc.) in the population described in "1" above. This population consists

of approximately 15,000 students (both post-high school and secondary).

The Samples

There are four samples involved in this study; one indirectly and three directly related to the evaluation of hypotheses. (Note: See Table I for a numeric description of the samples). These are as follows.

1. A sample of the population of occupational training students on which student characteristics data was gathered by the OTIS staff in the fall of 1968 using OTIS Form 2. This sample consists of 30,168 students. (Note: For a distribution of this sample by service division see Table II).
2. A subsample of the above sample of occupational training students on which dropout data was gathered by the Oklahoma Research Coordinating Unit in the fall of 1969. This subsample consists of 23,695 students.
3. A subsample of the sample of occupational training students; i.e. those students who were first year enrollees. This subsample was selected as most representative of enrollment rates uninfluenced by dropout rates. This subsample consists of 17,130 students.
4. A subsample of the first sample of occupational training students. This subsample consists of potential graduates (seniors, etc.) from whom economic benefit data was collected by the OTIS staff in the fall of 1969. It consists of 4,851 students.

TABLE I
 RELATIONSHIPS BETWEEN POPULATION SIZES AND SAMPLE SIZES

	Population*	OTIS Form 2 Sample	RCU Follow-up sample based on OTIS Form 2 Sample	OTIS Follow-up Sample based on OTIS Form 2 Sample
Students in full-time Programs	38,231	30,168		
First Year Students in full-time Programs	22,173	17,130		
Students on whom Dropout data was obtained			23,695	
Potential Graduates	15,000	13,775		4,851

*Source: Estimates by Byrle Killian, Assistant State Director of Vocational and Technical Education, Stillwater, Oklahoma

TABLE II

A COMPARISON OF THE SAMPLE OF OCCUPATIONAL TRAINING STUDENTS
WHO COMPLETED OTIS FORM 2 WITH THE POPULATION
OF OCCUPATIONAL TRAINING STUDENTS
BY SERVICE DIVISION

Service Division	Number Enrolled*	Number in Sample	Percent in Sample
Vocational Agriculture	18142	12451	67
Distributive Education	2136**	2293	107
Health Education	713**	794	111
Office Education	2270**	2682	118
Technical Education	3382	1694	74
Trade/Industrial Education	11586	10254	78
All Service Divisions	38231	30168	79

*Source: Estimates by Byrle Killian, Assistant State Director of Vocational and Technical Education, Stillwater, Oklahoma

** Estimates are less than number in OTIS sample.

Instruments

Five instruments were used to gather the data used in this report.

These were:

1. OTIS Form 2 - used to gather background data on the students,
2. OTIS Follow-up Questionnaire 1 - the first mail-out used to collect economic benefit data on the graduates,
3. OTIS Follow-up Questionnaire 2 - the second mail-out used to collect economic benefit data on the graduates,
4. OTIS Follow-up Questionnaire 3 - the third mail-out used to collect economic benefit data on the graduates, and
5. the RCU Follow-up Card - used to collect dropout data on the students.

OTIS Form 2 (see Appendix A) was designed at Oklahoma State University in the late summer of 1968. Organizations participating in the design process were the Occupational Training Information System, the Oklahoma Research Coordinating Unit, the Oklahoma State Department of Vocational and Technical Education, the Oklahoma State University Manpower Research and Training Center and the Oklahoma Industrial Development and Park Department.

OTIS Follow-up Questionnaire 1 through 3 (see Appendices B through D) were designed by the OTIS staff with advice from the Oklahoma State University Manpower Research and Training Center, the Oklahoma Research Coordinating Unit, the Oklahoma State Department of Vocational and Technical Education and from analysts from UARCO (a business forms company). In addition, Dr. David Pucel from the University of Minnesota served as a consultant for the design of OTIS Follow-up Questionnaire 3.

The RCU Follow-up Card (see Appendix E) was designed by the Research Coordinating Unit to comply with data reporting requirements of the United States Office of Education.

Data Collection

There were three different phases of data collection involved in compiling information for this study. These were:

1. Collection of background information from students in the fall of 1968,
2. Collection of economic benefit information from potential graduates in the summer and fall of 1969, and
3. Collection of dropout information in the fall of 1969.

To collect background data on the students in the fall of 1968, the Occupational Training Information System staff, with the aid of the Oklahoma State Department of Vocational and Technical Education, distributed OTIS Form 2's to all teachers of public school occupational training programs. The teachers then collected data from all students available and returned it to the OTIS staff. A useable total of 30,168 returns or data on about 80 percent of the students was gathered.

To collect economic benefit data from graduates, the Occupational Training Information System staff mailed three follow-up instruments at four week intervals to 13,775 potential graduates identified on OTIS Form 2's. The mailed instruments netted 4,851 returns. A 100 student sample of the non-returnees was then selected at random and surveyed by phone.

To collect dropout data, the Research Coordinating Unit sent Follow-up Data Cards with a student's name and identification code to appropriate teachers. The teachers completed and returned the cards to

the Research Coordinating Unit. Of the 30,168 students identified on OTIS Form 2's 23,695 were followed up in the fall of 1969 by the Research Coordinating Unit.

Analysis of Bias

The three samples used in this study cannot be considered to be random and therefore were examined for bias prior to testing the hypotheses.

Since all three samples were directly related to the data collected on OTIS Form 1 (the initial survey on student characteristics), it was necessary to first establish the generalizability of this information. This was done using a procedure suggested by Dr. Leroy Folks¹, i.e. a cross-reference method.

It was recognized that the bulk of students not represented in the sample were missing because entire classes had not been reported. The question then became "Are the students in classes which were not surveyed different from the students in classes which were surveyed?" The majority of the classes not surveyed were located in schools where home economics programs had been surveyed. It was reasoned that if the home economics students in these schools were not different from home economics students in other schools, the missing students would not be different from the sample available. (Note: Approximately 89 percent of the home economics programs had been surveyed.)

A chi square test was run on relevant variables comparing the two categories of home economics students and it was determined that although differences between the populations were found, they were considered to be too small to be of practical importance and were ignored in the subsequent analysis.²

From this result, it was immediately assumed that the data on first year enrollees was generalizable to the population of first year enrollees.

The sample used to determine dropout rates was related to the OTIS Form 2 sample in that only students in the latter sample were in the RCU follow-up. Since the OTIS Form 2 sample was considered to be generalizable and since the RCU follow-up study had an 85 percent return, no bias check was deemed necessary. The RCU sample was considered generalizable to the population.

The sample used to determine economic benefits of training was related to the OTIS Form 2 sample in that the OTIS follow-up used names and addresses of potential graduates identified in the latter sample. In this case, however the return was approximately 30 percent and additional checks for bias were considered necessary.

One hundred of the students who had not returned a questionnaire were randomly selected, contacted by phone and surveyed. The follow-up data on this group was compared with the return sample using a chi square test on relevant variables. This analysis indicated the populations were not significantly different. It was assumed that the sample was generalizable to the OTIS Form 2 sample and therefore generalizable to the population.

Statistical Tools

The statistical tool used in this study was the contingency table as described by Snedecor and Cochran³ and Huntsberger⁴. This tool utilizes chi square tables to compare two or more distributions. As the discrepancy between the distribution increases, the computed chi square value increases. When testing hypotheses that two distributions are

different, the hypotheses will be affirmed if the probability is less than .05 that they are the same. A correction for continuity was made for 2 by 2 chi square tests.

Analysis Procedures

Hypothesis 1 - There is a significant difference in the enrollment rates of disadvantaged students and non-disadvantaged students in occupational training.

1. This hypothesis was examined using three criteria:
 - a. a comparison of the proportion of Oklahoma's population that was culturally disadvantaged with the proportion of students in the first year of occupational training who were culturally disadvantaged,
 - b. a comparison of the proportion of Oklahoma's population that was economically disadvantaged with the proportion of students in the first year of occupational training who were economically disadvantaged, and
 - c. a comparison of the proportion of Oklahoma's school age population that was physically handicapped with the proportion of students in the first year of occupational training who were physically handicapped.
2. This hypothesis cannot be examined in terms of total disadvantaged because this information is not available for the Oklahoma population. (Note: The three categories of disadvantaged are not mutually exclusive and the sum of the three would over-state the proportion due to overlap).
3. Only first year students were examined to exclude the influence of dropout rates.

Hypothesis 2 - There are significant differences between the dropout rates of disadvantaged students and non-disadvantaged students in occupational training.

This hypothesis was examined by comparing the dropout rates of students identified as disadvantaged with that of students identified as non-disadvantaged. The time interval involved was from the fall of 1968 to the fall of 1969. In addition, the dropout rates of the culturally disadvantaged, the economically disadvantaged and the physically handicapped were disaggregated and examined in detail.

Hypothesis 3 - There is a significant difference between the economic benefits received by disadvantaged graduates of occupational training and non-disadvantaged graduates of occupational training.

1. This hypothesis was examined using two criteria:

- a. a comparison of the proportion of disadvantaged graduates who obtain employment in a field related to the training they received with the proportion of non-disadvantaged graduates who obtain the same type of employment, and
- b. a comparison of the salaries of non-disadvantaged graduates with the salaries of disadvantaged graduates. Only those graduates who received employment in a field related to their training were considered under the second criterion. It was felt that salaries from other types of employment were not a direct result of training.

Sub-hypothesis 1 - There are significant differences between the proportion of culturally disadvantaged occupational students in SMSA counties and the proportion of culturally disadvantaged occupational students in non-SMSA counties.

This hypothesis was examined by comparing the proportion of disadvantaged enrollees in the SMSA counties with the proportion of disadvantaged enrollees in the non-SMSA counties. Since the proportion of disadvantaged people in these two areas is approximately equal (9.32 percent in the non-SMSA counties and 9.58 percent in the SMSA counties), population distribution in a broad sense should not be an intervening variable.

Sub-hypothesis 2 - There is a significant difference between the proportions of secondary occupational students who are disadvantaged and the proportion of post-high school occupational students who are disadvantaged.

This hypothesis was examined by comparing the proportion of first year occupational training students who were disadvantaged with the proportion of first year post-high school occupational training students who were disadvantaged. Only first year students were examined to exclude the influence of dropout rates.

Sub-hypothesis 3 - There are significant differences between the enrollment rates of the disadvantaged in different occupational program types.

This hypothesis was examined by comparing the proportion of first year students who were disadvantaged in selected program types. Only first year students were examined to exclude the influence of dropout rates. The programs were randomly selected on a stratified basis from each service division.

Sub-hypothesis 4 - There is a significant difference between the dropout rates of disadvantaged occupational students from different program types.

This hypothesis was examined by comparing the dropout rates of the disadvantaged students in selected program types. The programs were randomly selected from each service division.

Sub-hypothesis 5 - There is a significant difference between the subsequent employment of disadvantaged graduates and non-disadvantaged graduates of occupational training programs.

This hypothesis was examined by comparing the proportion of disadvantaged graduates obtaining employment in a field related to their training within three to six months and the proportion of non-disadvantaged graduates obtaining the same type of employment in the same time period. This hypothesis is a disaggregated part of Hypothesis 3.

Sub-hypothesis 6 - There is a significant difference between beginning salaries obtained by disadvantaged graduates and non-disadvantaged graduates of occupational training.

This hypothesis was examined by comparing the salary distribution of disadvantaged graduates and the salary distribution of non-disadvantaged graduates. This hypothesis is a disaggregated part of Hypothesis 3.

Sub-hypothesis 7 - There is a difference between disadvantaged graduates' evaluation of occupation training (in terms of employment benefits) and non-disadvantaged graduates' evaluation of occupational training.

This hypothesis was examined by comparing the responses of disadvantaged graduates and non-disadvantaged graduates to the question, "How do you rate your training in terms of employment benefits to you? - high, average, low or not applicable."

Sub-hypothesis 8 - There is a significant difference between the beginning salaries of graduates who receive employment in related fields and graduates who receive employment in other fields.

This hypothesis was examined by comparing the median salary of graduates who were employed in related fields with the salary of graduates who received employment in unrelated fields.

Sub-hypothesis 9 - There are differences between the economic benefits derived from different programs.

This hypothesis was examined by comparing the subsequent employment obtained and salaries received of graduates from selected program types.

Summary

From a population of 38,231 full-time public-school enrollees in occupational training in Oklahoma in 1968, OTIS gathered useable student characteristic data from 30,168 students. The RCU gathered dropout data on 23,695 of these students in the fall of 1969. Also during the fall of 1969, OTIS collected benefit data from 4,851 graduates.

Five instruments were used to collect the data. The instruments were designed during the development phases of the OTIS project or were developed by the RCU. They included:

1. OTIS Form 2 - used to gather background data on the students,
2. OTIS Follow-up Questionnaire 1 - the first mail-out used to collect economic benefit data on the graduates,
3. OTIS Follow-up Questionnaire 2 - the second mail-out used to collect economic benefit data on the graduates,

4. OTIS Follow-up Questionnaire 3 - the third mail-out used to collect economic benefit data on the graduates, and
5. the RCU Follow-up Card - used to collect dropout data on the students.

A bias check was conducted to determine the generalizability of the sample data. Only very small differences were found between the population and the samples and for practical purposes the sample data was considered to be generalizable to the population.

The contingency table was selected as the basic statistical tool for analysis. This tool uses the chi square statistic to check for significance.

The analysis was conducted using two dimensional matrices of data, i.e. disadvantaged and non-disadvantaged versus secondary students and post-high school students, etc.

FOOTNOTES

¹Dr. Leroy Folks is a Professor in and Chairman of the Statistical Unit of the Math Department at Oklahoma State University.

²Snedecor and Cochran, Statistical Methods, pp. 250-252.

³Ibid., p. 28.

⁴Huntsberber, Elements of Statistical Inference, pp. 180-185.

CHAPTER IV

ANALYSIS

Introduction

This chapter presents (1) the statistical analysis and the disposition of the hypotheses and sub-hypotheses examined in this investigation and (2) a description of additional findings related to six of the seven service divisions.

Disposition of Hypothesis 1

Hypothesis 1 which states "There are significant differences between the enrollment rates of the disadvantaged and the non-disadvantaged in occupational training" was affirmed in all three categories of disadvantaged defined in this study. The culturally disadvantaged and the physically handicapped were found to have higher enrollment rates than the rest of the population while the opposite was found relative to the economically disadvantaged. The results of the statistical analysis were the following.

1. The null hypothesis that there was no significant difference between enrollment rates of the culturally disadvantaged and the non-culturally disadvantaged was rejected on the basis of a computed Chi Square value of 69.40 (d.f. = 1) and a tabular Chi Square value of 3.84 for the .05 level of significance.

Table III shows the cell values used in computing the Chi Square value.

TABLE III

THE CULTURALLY DISADVANTAGED BY ENROLLMENT IN OCCUPATIONAL TRAINING AND BY STATE POPULATION

	Oklahoma Population	Training Population
Not Culturally Disadvantaged	2,083,725	15,182
Culturally Disadvantaged	217,103	1,948

2. The null hypothesis that there was no significant difference between the enrollment rates of the economically disadvantaged and the non-economically disadvantaged was rejected on the basis of a computed Chi Square value of 2034.79 (d.f. = 1) and a tabular Chi Square value of 3.84 for the .05 level of significance. Table IV shows the cell values used in computing the Chi Square value.
3. The null hypothesis that there was no significant difference between the enrollment rates of the physically handicapped and the non-physically handicapped was rejected on the basis of a computed Chi Square value of 6.20 (d.f. = 1) and a tabular Chi

Square value of 3.84 for the .05 level of significance. Table V shows the cell values used in computing the Chi Square value.

TABLE IV

THE ECONOMICALLY DISADVANTAGED BY ENROLLMENT IN OCCUPATIONAL TRAINING AND BY STATE POPULATION

	Oklahoma Population	Training Population
Economically Disadvantaged	679,600	2,008
Not Economically Disadvantaged	1,797,400	15,128

TABLE V

THE PHYSICALLY HANDICAPPED BY ENROLLMENT IN OCCUPATIONAL TRAINING AND BY SCHOOL POPULATION

	School Population	Training Population
Physically Handicapped	20,823	686
Not Physically Handicapped	551,383	16,444

Disposition of Hypothesis 2

Hypothesis 2 which states "There is a significant difference between the dropout rates of disadvantaged students and non-disadvantaged students in occupational training" was affirmed. The null hypothesis related to the above research hypothesis was rejected on the basis of a computed Chi Square value of 110.74 (d.f. = 1) and a tabular Chi Square value of 3.84 for the .05 level of significance. The disadvantaged were found to have a higher dropout rate than the non-disadvantaged. Table VI shows the cell values used to compute the Chi Square value.

TABLE VI

DISADVANTAGED DROPOUTS VERSUS
NON-DISADVANTAGED DROPOUTS

	Dropouts	Non-Dropouts
Disadvantaged Students	1,616	4,070
Non-Disadvantaged Students	3,898	14,111

In addition to the above test, four sub-categories of disadvantaged were examined relative to the same variable. The economically disadvantaged students, the Black students and the Indian students were found to have dropout rates higher than the rest of the student population

while the physically handicapped students were found to have lower drop-out rates. The results of the statistical analysis were:

1. The null hypothesis that there was no significant difference between the dropout rates of the Black students and the non-Black students was rejected on the basis of a computed Chi Square value of 40.29 (d.f. = 1) and a tabular Chi Square value of 3.84 for the .05 level of significance. Table VII shows the cell values used to compute the Chi Square value.

TABLE VII
BLACK DROPOUTS VERSUS
NON-BLACK DROPOUTS

	Dropouts	Non-Dropouts
Black Students	483	1,142
Non-Black Students	5,031	17,039

2. The null hypothesis that there was no significant difference between the dropout rates of the Indian students and the non-Indian students was rejected on the basis of a computed Chi Square value of 57.11 (d.f. = 1) and a tabular Chi Square value of 3.84 for the .05 level of significance. Table VIII shows the cell values used to compute the Chi Square value.

3. The null hypothesis that there was no significant difference between dropout rates of the economically disadvantaged and the non-economically disadvantaged was rejected on the basis of a computed Chi Square value of 56.04 (d.f. = 1) and a tabular Chi Square value of 3.84 for the .05 level of significance. Table IX shows the cell values used to compute the Chi Square value.
4. The null hypothesis that there was no significant difference between dropout rates of the physically handicapped and the non-physically handicapped students was rejected on the basis of a computed Chi Square value of 15.74 (d.f. =1) and a tabular Chi Square value of 3.84 for the .05 level of significance. Table X shows the cell values used to compute the Chi Square value.

TABLE VIII

INDIAN DROPOUTS VERSUS
NON-INDIAN DROPOUTS

	Dropouts	Non-Dropouts
Indian Students	318	632
Non-Indian Students	5,196	17,549

TABLE IX

ECONOMICALLY DISADVANTAGED DROPOUTS VERSUS
NON-ECONOMICALLY DISADVANTAGED DROPOUTS

	Dropouts	Non-Dropouts
Economically Disadvantaged	818	2,016
Non-Economically Disadvantaged	4,696	16,165

TABLE X

PHYSICALLY HANDICAPPED DROPOUTS VERSUS
NON-PHYSICALLY HANDICAPPED DROPOUTS

	Dropouts	Non-Dropouts
Physically Handicapped	155	749
Non-Physically Handicapped	5,359	17,432

Disposition of Hypothesis 3

Hypothesis 3 which states "There is a significant difference between the economic benefits received by disadvantaged graduates and non-disadvantaged graduates of occupational training" could not be affirmed

relative to either of the criteria used in this study. Results of the statistical analysis were:

1. The null hypothesis that there was no significant difference between the beginning salaries of disadvantaged graduates and non-disadvantaged graduates could not be rejected on the basis of a computed Chi Square value of .66 (d.f. = 3) and a tabular Chi Square value of 7.81 for the .05 level of significance.

Table XI shows the cell values used to compute the Chi Square value.

TABLE XI

BEGINNING SALARIES OF DISADVANTAGED GRADUATES VERSUS
BEGINNING SALARIES OF NON-DISADVANTAGED GRADUATES

	Less Than \$3000	\$3000- \$4000	\$4001- \$5000	More Than \$5000
Disadvantaged Graduates	81	62	46	36
Non-Disadvantaged Graduates	486	357	235	195

2. The null hypothesis that there was no significant difference between the proportion of disadvantaged graduates who received related employment and the proportion of non-disadvantaged graduates who received related employment could not be rejected

on the basis of a computed Chi Square value of .48 (d.f. = 1) and the tabular Chi Square value of 3.84 for the .05 level of significance. Table XII shows the cell values used to compute the Chi Square value.

TABLE XII
EMPLOYMENT OF DISADVANTAGED GRADUATES VERSUS
EMPLOYMENT OF NON-DISADVANTAGED GRADUATES

	Got Related Job	Did Not Get Related Job*
Disadvantaged Graduates	124	298
Non-Disadvantaged Graduates	692	1523

*Includes Graduates Who Entered The Military or Continued Education.

Disposition of Sub-Hypothesis 1

Sub-Hypothesis 1 which states "There is a significant difference between the proportion of culturally disadvantaged occupational students in the SMSA counties and the proportion of culturally disadvantaged occupational students in non-SMSA counties" was affirmed. The null hypothesis related to the research hypotheses stated above was rejected on the basis of a computed Chi Square value of 12.80 (d.f. = 1) and a tabular Chi Square value of 3.84 for the .05 level of significance.

Table XIII shows the cell values used to compute the Chi Square value. There was a larger proportion of culturally disadvantaged enrolled in the non-SMSA counties than in the SMSA counties.

TABLE XIII

CULTURALLY DISADVANTAGED STUDENTS ENROLLED IN OCCUPATIONAL TRAINING IN THE SMSA COUNTIES VERSUS CULTURALLY DISADVANTAGED STUDENTS IN OCCUPATIONAL TRAINING IN THE NON-SMSA COUNTIES

	SMSA	Non-SMSA
Culturally Disadvantaged	580	1,366
Non-Culturally Disadvantaged	5,147	10,037

Disposition of Sub-Hypothesis 2

Sub-Hypothesis 2 which states "There is a significant difference between the proportion of disadvantaged students in secondary occupational training and the proportion of disadvantaged students in post-high school occupational training" was affirmed. The null hypothesis related to the research hypothesis above was rejected on the basis of a computed Chi Square value of 152.92 (d.f. = 1) and a tabular Chi Square value of 3.84 for the .05 level of significance. The percent of post-high school students who were disadvantaged was larger than the percent

of secondary students who were disadvantaged. Table XIV shows the cell values used to compute the Chi Square value.

TABLE XIV

DISADVANTAGED STUDENTS IN POST-HIGH SCHOOL OCCUPATIONAL
TRAINING VERSUS DISADVANTAGED STUDENTS IN SECONDARY
OCCUPATIONAL TRAINING

	Post-High School	Secondary
Disadvantaged Students	699	3,399
Non-Disadvantaged Students	1,699	11,333

Disposition of Sub-Hypothesis 3

Sub-Hypothesis 3 which states "There is a significant difference between the enrollment rates of disadvantaged occupational students in different program types" was affirmed. The null hypothesis related to the research hypothesis above was rejected on the basis of a computed Chi Square value of 214.19 (d.f. = 7) and a tabular Chi Square value of 14.07 for the .05 level of significance. Table XV shows the cell values used to compute the Chi Square value.

TABLE XV
ENROLLMENT OF THE DISADVANTAGED BY SELECTED PROGRAM TYPE

	Disadvantaged		Non-Disadvantaged	
	Number	Percent	Number	Percent
Production Agriculture	912	23	2,969	77
Cooperative Distributive Education	186	11	1,520	89
Practical Nursing	121	24	386	76
Cooperative Office Education	216	17	1,064	83
Technical Electronics	166	24	516	76
Automobile Mechanics	417	30	954	70
Carpentry	243	35	451	65
Welding	69	28	179	72

TABLE XVI
DISADVANTAGED DROPOUTS BY PROGRAM TYPE

	Dropouts		Non-Dropouts	
	Number	Percent	Number	Percent
Production Agriculture	446	48	466	52
Cooperative Distributive Education	65	35	124	65
Practical Nursing	21	17	100	83
Cooperative Office Education	71	33	145	66
Technical Electronics	85	51	81	49
Automobile Mechanics	169	41	248	59
Carpentry	107	44	136	56
Welding	34	49	35	51

Disposition of Sub-Hypothesis 4

Sub-Hypothesis 4 which states "There is a significant difference between the dropout rates of disadvantaged occupational students in various program types" was affirmed. The null hypothesis related to the research hypothesis above was rejected on the basis of a computed Chi Square value of 67.06 (d.f. = 7) and a tabular Chi Square value of 14.07 for the .05 level of significance. Table XVI shows the cell values used to compute the Chi Square value.

Disposition of Sub-Hypothesis 5

Sub-Hypothesis 5 which states "There is a significant difference between the subsequent employment received by disadvantaged graduates and non-disadvantaged graduates of occupational training" could not be affirmed. The null hypothesis related to the research hypothesis above could not be rejected on the basis of a computed Chi Square value of .48 (d.f. = 1) and a tabular Chi Square value of 3.84 for the .05 level of significance. Table XII shows the cell values used to compute the Chi Square value.

Disposition of Sub-Hypothesis 6

Sub-Hypothesis 6 which states "There is a significant difference between beginning salaries of disadvantaged graduates and non-disadvantaged graduates of occupational training" could not be affirmed. The null hypothesis related to the research hypothesis above could not be rejected on the basis of a computed Chi Square value of .66 (d.f. = 3) and a tabular Chi Square value of 7.81 for the .05 level of significance. Table XI shows the cell values used to compute the Chi Square value.

Disposition of Sub-Hypothesis 7

Sub-Hypothesis 7 which states "There is a significant difference between disadvantaged graduates' evaluation of their occupational training in terms of employment benefits and non-disadvantaged graduates' evaluation" could not be affirmed. The null hypothesis related to the research hypothesis above could not be rejected on the basis of a computed Chi Square value of .11 (d.f. = 2) and a tabular Chi Square value of 5.99 for the .05 level of significance. Table XVII shows the cell values used to compute the Chi Square value.

TABLE XVII

PROGRAM EVALUATION OF DISADVANTAGED GRADUATES VERSUS
PROGRAM EVALUATION OF NON-DISADVANTAGED GRADUATES

	Good	Average	Poor
Disadvantaged Graduates	145	150	25
Non-Disadvantaged Graduates	749	753	146

Disposition of Sub-Hypothesis 8

Sub-Hypothesis 8 which states "There is a significant difference between the beginning salaries of graduates from occupational training who receive employment in related fields and graduates who receive

employment in other fields" was affirmed. The null hypothesis related to the research hypothesis above was rejected on the basis of a computed Chi Square value of 290.09 (d.f. = 1) and a tabular Chi Square value of 3.84 for the .05 level of significance. Graduates who received employment in related fields received significantly higher salaries than graduates who received employment in other fields. Table XVIII shows the cell values used to compute the Chi Square value.

TABLE XVIII

SALARIES OF GRADUATES WHO RECEIVED EMPLOYMENT IN RELATED
FIELDS VERSUS SALARIES OF GRADUATES WHO RECEIVED
EMPLOYMENT IN NON-RELATED FIELDS

	Less Than \$3000	\$3000- \$4000	\$4001 \$5000	More Than \$5000
Graduates Who Received Employment in Related Fields	136	268	199	179
Graduates Who Received Employment in Non-Related Fields	407	146	81	48

Disposition of Sub-Hypothesis 9

Sub-Hypothesis 9 which states "There is a significant difference in the economic benefits received from different occupational program

types" was affirmed relative to both of the criteria used in this investigation. Results of the statistical analysis were:

1. The null hypothesis that there was no significant difference in the salaries of graduates from different program types was rejected on the basis of a computed Chi Square value of 284.18 (d.f. = 21) and a tabular Chi Square value of 32.67 for the .05 level of significance. Table XIX shows the cell values used to compute the Chi Square value.
2. The null hypothesis that there was no significant difference in the proportion of graduates who received related employment in different program types was rejected on the basis of a computed Chi Square value of 253.67 (d.f. = 7) and a tabular Chi Square value of 100.77 for the .05 level of significance. Table XX shows the cell values used to compute the Chi Square value.

Additional Findings

In addition to examining the hypotheses presented in this study, six service divisions (Home Economics which is essentially consumer education in Oklahoma was excluded) were compared in terms of first year enrollment rates of the disadvantaged, dropout rates of the disadvantaged and economic benefits received from occupational training by disadvantaged graduates. Although the data was not tested for statistical significance, however, marked differences may be seen for different service divisions.

In Table XXI, the percent of first year students who are disadvantaged is presented by service division. It can be seen that the percent varies with category of training. The extremes are found in the Trade and Industrial division with 29.13 percent of the students reported to

TABLE XIX
GRADUATES' SALARIES BY SELECTED PROGRAM TYPE

	Less Than \$3000	\$3000- \$4000	\$4001- \$5000	More Than \$5000
Vocational Agriculture	63	32	14	9
Cooperative Distributive Education	84	36	21	9
Practical Nursing	21	49	93	23
Cooperative Office Education	104	82	35	5
Technical Electronics	15	4	4	27
Automobile Mechanics	40	34	15	10
Carpentry	24	10	6	4
Welding	8	2	6	5

TABLE XX

EMPLOYMENT OF THOSE GRADUATES AVAILABLE FOR PLACEMENT
IN RELATED FIELDS BY SELECTED PROGRAM TYPE

	Employed in Related Field		Not Employed in Related Field	
	Number	Percent	Number	Percent
Vocational Agriculture	37	43	50	57
Cooperative Distributive Education	63	52	59	48
Practical Nursing	172	89	21	11
Cooperative Office Education	133	57	100	43
Technical Electronics	30	81	7	19
Automobile Mechanics	42	47	48	53
Carpentry	16	37	27	63
Welding	12	46	14	54

TABLE XXI

DISADVANTAGED AS A PERCENT OF TOTAL FIRST YEAR ENROLLMENT
 BY SERVICE DIVISION
 (N = 17,130)

	Oklahoma Population	All Programs	Agriculture	Distributive	Health	Office	Technical	Trade and Industrial
Percent Black	6.60	7.34	4.81	2.70	7.49	6.95	7.35	10.65
Percent Indian	2.80	4.01	4.18	1.80	3.67	4.00	2.13	4.85
Percent Culturally Disadvantaged	9.50	11.36	9.00	4.50	11.16	10.95	9.48	15.50
Percent Economically Disadvantaged	27.00	11.72	13.85	4.27	10.72	10.68	6.38	13.42
Percent Physically Handicapped	3.77	4.00	3.19	2.42	3.23	2.74	3.45	5.60
Percent Disadvantaged*	-	23.92	23.16	11.13	22.03	21.05	20.19	29.62

*Is not the total of above columns due to multiple disadvantages among the disadvantaged population.

be disadvantaged and in the Distributive division with 11.13 percent of the students reported to be disadvantaged. All other service divisions are within four percentage points of the figure computed for all service divisions.

In Table XXII, the yearly dropout rate of all students and the yearly dropout rate of disadvantaged students are presented by service division. The percent that the disadvantaged rates varied from the non-disadvantaged rates was calculated to examine the effect of being disadvantaged by service division. It can be seen that the dropout rates of the disadvantaged are higher in all service divisions except Office Education. Health Education and Office Education set the extreme parameters of variance of the disadvantaged dropout rates in terms of the non-disadvantaged dropout rate with '100 percent difference' and 'no difference' respectively. The yearly dropout rate varies from division with Technical Education and Health Education setting the extreme parameters with a dropout rate of '43 percent' and '18 percent' for disadvantaged students respectively.

Data shown in Table XXIII indicates the percent of graduates who are disadvantaged by service division. As might be expected, the percent of graduates who are disadvantaged varies greatly from division to division.

Table XXIV presents economic benefit data by service division. The data is relative to all students but may also apply to the disadvantaged since there is very little difference between the economic benefits received by the disadvantaged graduates and the non-disadvantaged graduates of occupational training (Note: See "Disposition of Hypothesis 3").

It can be seen that beginning salaries vary greatly from division to division. The two divisions whose students receive the highest

TABLE XXII
 YEARLY DROPOUT OF DISADVANTAGED STUDENTS
 BY SERVICE DIVISION
 (N = 23,695)

	Agriculture	Distributive	Health	Office	Technical	Trade and Industrial
Percent Dropout for All Students	19	19	9	23	33	30
Percent Dropout for Disadvantaged Students	25	27	18	23	43	33
Percentage Point Difference for Dropout of Disadvantaged and All Students	6	8	9	0	10	3
Percent of Difference for Dropout of All Students and Disadvantaged Students	32	42	100	0	30	10

TABLE XXIII

PERCENT OF GRADUATES WHO ARE DISADVANTAGED
 BY SERVICE DIVISION
 (N = 2,630)

	All Programs	Agriculture	Distributive	Health	Office	Technical	Trade and Industrial
Percent Black	3.54	2.00	.71	6.51	2.55	2.82	4.76
Percent Indian	1.94	2.29	1.06	.98	1.19	1.69	2.92
Percent Culturally Disadvantaged	5.48	4.29	1.77	7.49	3.74	4.52	7.68
Percent Economically Disadvantaged	8.40	9.43	3.19	9.45	5.43	8.47	11.14
Percent Physically Handicapped	3.38	2.57	1.77	2.93	.85	3.39	5.95
Percent Disadvantaged	9.47	14.29	6.38	17.26	10.02	15.25	21.62

TABLE XXIV

ECONOMIC BENEFITS BY SERVICE DIVISION
(N = 2,637)

	Agriculture	Distributive	Health	Office	Technical	Trade and Industrial
Median Salaries Received by Graduates Who Receive Related Employment	\$3,687	\$3,222	\$4,214	\$3,785	\$5,667	\$3,754
Proportion of Graduates Placed in Related Occupations (Percent) (OTIS Follow-up)	13	21	68	30	28	30

beginning salaries, Health Education and Technical Education, offer a majority of their programs at the post-high school level. Distributive Education and Vocational Agriculture programs seem to offer the least in terms of beginning salaries to graduates.

In terms of employment received in related fields by graduates, Health Education sets the upper parameter with more than twice as large a placement rate as any other service division. Vocational Agriculture has the lowest immediate related employment rate of any division.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings

The following list of statements is a summary of the findings presented previously. Although not all of the statements are based on the affirmation of a research hypothesis, they are all considered findings in that those which are not supported by an affirmation are strongly supported by the variance found in a Chi Square test.

1. The percent of culturally disadvantaged occupational enrollees and the percent of physically handicapped occupational enrollees are higher than the percent of culturally disadvantaged and physically handicapped in the Oklahoma population while the reverse is true for economically disadvantaged enrollees.
2. The proportion of culturally disadvantaged occupational enrollees is higher in the non-SMSA counties than in the SMSA counties although the proportion of culturally disadvantaged is approximately equal in the two types of geographic areas.
3. The proportion of disadvantaged occupational students in secondary training is lower than the proportion of disadvantaged occupational students in post-high school training.
4. Program type has an influence on enrollment rates of the disadvantaged in occupational training.

5. The disadvantaged have a higher dropout rate in occupational training than the non-disadvantaged in all categories defined in this study with the exception of the physically handicapped who have a lower dropout rate than the non-physically handicapped.
6. Program type has an influence on dropout rates of the disadvantaged in occupational training.
7. Economic benefits received by the disadvantaged of occupational training are not significantly different from those received by the non-disadvantaged.
8. Salaries received by disadvantaged graduates of occupational training are not significantly different from those received by non-disadvantaged graduates.
9. Placement rates for disadvantaged graduates of occupational training are not significantly different from placement rates of non-disadvantaged graduates.
10. Disadvantaged graduates and non-disadvantaged graduates rate (in terms of employment benefits) their occupational training in approximately the same way.
11. Trade and Industrial programs have a comparatively high percentage of disadvantaged enrollees while Distributive programs have a comparatively low percentage of disadvantaged graduates.
12. Health Education has a relatively low dropout rate of disadvantaged students while Technical Education relatively has a high dropout rate of disadvantaged students.
13. Economic benefits from Health Education programs are compar-

atively high while those from Vocational Agriculture and Distributive programs are comparatively low.

Conclusions

No significant difference was found in the economic benefits received by disadvantaged graduates and non-disadvantaged graduates of occupational training. It is assumed, therefore, that if a disadvantaged student completes his training he has employment opportunities somewhat equal to those of non-disadvantaged graduates. The implication is that occupational training is one method of improving the economic opportunities of the disadvantaged. This in no way means that the disadvantaged do not find opportunities in other forms of education, however, occupational training should be recognized as one meaningful alternative to academic or professional education.

A caution which should be noted is that economic benefits as defined in this study relate only to the immediate period after graduation. It is possible that disadvantaged graduates receive equal economic opportunities initially but receive less benefit in later stages of their careers. A longitudinal study of graduates could provide data which would give a better picture of the benefits received.

Findings of this study indicate that:

1. There is no significant difference in the salaries received by disadvantaged graduates and non-disadvantaged graduates of occupational training and
2. Graduates who receive employment in a field related to their training receive higher salaries than graduates who receive employment in non-related fields.

It therefore may be concluded that one way of improving the economic benefits received from occupational training by disadvantaged graduates would be to place more of them in related training.

A system (OTIS) has been developed in Oklahoma to provide labor market information to graduates. This system should be continued and possibly expanded with the express purpose of designing programs to meet the manpower needs of Oklahoma. Special efforts should be directed toward placement of disadvantaged graduates.

Disadvantaged enrollments and dropout rates, and economic benefits received from training were found to be related to program type. Efforts to meet the needs of the disadvantaged should take program type into consideration. It makes no sense to establish special training programs for the disadvantaged in which they do not enroll, have an exceptionally high dropout rate or from which they receive little economic benefit.

For some reason, the culturally disadvantaged in the SMSA counties do not enroll in occupational training in the same proportions that they enroll in non-SMSA counties. A further investigation should be conducted to determine if this situation is possibly the result of the delivery system and/or content which is not relevant to the needs of the disadvantaged in these counties or some other factor.

As might be expected from the relatively high dropout rates of the disadvantaged, as a training program progresses along its predetermined time frame, fewer disadvantaged students are involved in the occupational training. An implication of this finding is "Special programs for the disadvantaged should be started as early in the educational experience as possible in order to reach the greatest number of potential enrollees."

If, as the analysis of data indicates, the disadvantaged have a higher dropout rate in occupational training than the non-disadvantaged, efforts should be made to determine factors which cause the former to not continue their education. The 'Review of Literature' in this paper suggests some factors which might be examined.

A second approach to meet the needs of the disadvantaged would be the restructuring of occupational training to decrease the penalties for dropping out of a program. (Note: Efforts should be made to insure that the dropout rates of the disadvantaged do not increase because of this policy). Methods to achieve this objective might include:

- a. Multiple exit points in the programs (even at the secondary level) which provide the student who drops out entry to lower skill level employment.
- b. The provision for dropouts to continue their education in adult programs which start the student at the level he had reached in the full-time program.
- c. Individualized instruction which is not fixed to any time schedule and therefore, would allow the dropout to continue his education, including night studies, when his schedule allows. This individualized instruction should also have provisions for early completion, so a student could achieve the highest possible level prior to dropping out.

One of the major concepts revealed in the findings of this study is that it is difficult to 'treat' the disadvantaged as a single group. The variance in findings relative to different subgroups implies that caution should be taken in making generalizations about characteristics of the disadvantaged. Also, special programs should be designed for a particular subgroup and not for the broad group. The physically

handicapped constitute an extreme example in the area of dropout rates. It would seem that a physically handicapped individual who enters occupational training has a better than average chance of completing the program.

Recommendations

Related to Needed Research

1. A longitudinal study of the economic benefits of occupational training should be conducted to determine the total career effect of occupational training for disadvantaged groups.
2. An investigation of programs in which disadvantaged groups have a high enrollment rate should be conducted to determine what special characteristic of the program, if any, appeal to the disadvantaged.
3. An investigation of programs in which disadvantaged groups have a low dropout rate should be conducted to determine what special characteristics of the program, if any, influence dropout rates.
4. An investigation of occupational training in the SMSA counties should be conducted to determine why enrollment rates of the culturally disadvantaged are proportionally less in these areas.

Related to the Adjustment of Occupational Training

1. Guidance counselors should be informed of the economic opportunities available to the disadvantaged in occupational training, e.g., employment opportunities and beginning salaries.
2. Placement should be emphasized by the Department of Vocational and Technical Education with special concern for placement

of the disadvantaged.

3. Special programs for the disadvantaged should be started as early in the educational experience as possible to increase the number of potential trainees and, hopefully, decrease the percent of dropouts.
4. Exit points should be incorporated throughout occupational training to decrease the penalty for dropping out.
5. Individualized instruction should be incorporated in occupational training to allow the student an opportunity for early completion.
6. Special occupational training for the disadvantaged should be related to the type of training he will accept as an economic opportunity. Present enrollment rates might be an indicator of acceptance.
7. Special programs for the disadvantaged should be designed for particular subgroups and should not try to meet the needs of all disadvantaged students as these needs are not necessarily congruent.
8. Opportunities for disadvantaged dropouts to continue their training from their present point of achievement should be included in adult occupational training.

A SELECTED BIBLIOGRAPHY

- Bishop, C.E. The People Left Behind. Washington, D.C.: U.S. Department of Labor, 1967.
- Bohleber, Michael E. Disabilities in Oklahoma: Estimates and Projections. Stillwater, Oklahoma: Oklahoma State University Research Foundation.
- Braden, Paul V., et. al. Occupational Training Information System Cycle Two Report -- A Second Yearly Report Complete With System Documentation. Stillwater, Oklahoma: Oklahoma State University Research Foundation, 1970.
- Bureau of Labor Statistics and Bureau of the Census. Recent Trends in Social and Economic Conditions of Negroes in the United States. Washington, D.C.: U.S. Government Printing Office, 1968.
- Bureau of Labor Statistics and Bureau of the Census. Social and Economic Conditions of Negroes in the United States. BLS Report No. 332: Washington, D.C.: U.S. Government Printing Office, 1967.
- Department of Public Welfare. Annual Report, 1968-1969. Oklahoma City, Oklahoma: The Department, 1969.
- Division of Special Education. A Program of Education for Exceptional Children in Oklahoma. Bulletin S.E. No. 7: Oklahoma City, Oklahoma: Oklahoma State Department of Education, 1968.
- Eckstein, Otto. Education, Employment and Negro Equality. Washington, D.C.: U.S. Department of Labor, 1968.
- Egermeier, John Charles. Construction and Validation of a College Dropout Predictor Scale for the Minnesota Counseling Inventory. Stillwater, Oklahoma: Oklahoma State University Research Foundation, 1963.
- Ginzberg, Eli. The Development of Human Resources. New York, N.Y.: McGraw-Hill Book Company, 1966.
- Gordon, Margaret S. Poverty in America. San Francisco, California: Chandler Publishing Company, 1965.
- Huntsberger, David V. Elements of Statistical Inference. Boston, Massachusetts: Allyn and Bacon, Inc., 1961.

- Hyman, H.H. "The Value Systems of Different Classes: A Social Psychological Contribution to the Analysis of Stratification", Class, Status and Power. Glencoe, Illinois: Reinhard, Bendix and Seymore, 1957.
- Jencho, Christopher and David Riesman. The Academic Revolution. Garden City, New York, Doubleday and Company, 1968.
- Killingsworth, Charles C. Jobs and Income for Negroes. Washington, D.C.: National Manpower Policy Task Force, 1968.
- Kruger, Daniel H. and Arthur W. Saltzman. Developing Jobs for the Disadvantaged. Detroit, Michigan: Michigan Economic Opportunity Office, 1966.
- MacIver, R.M. The Assault on Poverty. New York, N.Y.: Harper and Row, Publishers, 1965.
- National Advisory Commission on Civil Disorders. Report of the National Advisory Commission on Civil Disorders. New York, N.Y.: The New York Times, 1968.
- National Advisory Commission on Civil Disorders. Supplemental Studies for the National Advisory Commission on Civil Disorders, Washington, D.C.: U.S. Government Printing Office, 1968.
- National Committee on Secondary Education. Educating for Work. Paper Number Two: Washington, D.C.: The National Association of Secondary School Principals, 1967.
- National Committee on Employment of Youth. A Guide to the Development of Vocational Education Programs and Services for the Disadvantaged. New York, New York: The Committee, 1969.
- New York Herald Tribune. The U.S. Book of Facts, Statistics and Information. New York: Pocket Books, Inc., 1967.
- Oklahoma Employment Security Commission. Distribution of Population by Race in Oklahoma. Oklahoma City, Oklahoma: The Commission, 1967.
- Putnam, John F. and W. Dale Chismore. Standard Terminology for Curriculum and Instruction in State and Local School Systems. Volume I: Washington, D.C.: U.S. Office of Education, 1969.
- Putnam, John F. and W. Dale Chismore. Standard Terminology for Curriculum and Instruction in State and Local School Systems. Volume II: Washington, D.C.: U.S. Office of Education, 1969.
- Sheppard, Harold L. A Search for New Directions in the War Against Poverty. Washington, D.C.: Upjohn Institute, 1968.
- Sheppard, Harold L. and Herbert E. Striner. Civil Rights, Employment, and the Social Status of American Negroes. Washington, D.C.: Upjohn Institute, 1966.

- Snedecor, George W. and William G. Cochran. Statistical Methods. Arnes, Iowa: The Iowa State University Press, 1967.
- State Department of Vocational and Technical Education. Personnel Directory. Stillwater, Oklahoma: The Department, 1969.
- Tweeten, Luther G. Rural Poverty: Incidence, Causes and Cures. Processed Series P-590: Stillwater, Oklahoma: Oklahoma State University, 1968.
- U.S. Department of Commerce. U.S. Census of Population 1960. Washington, D.C.: Bureau of the Census Final Report DC(2)-6B: U.S. Government Printing Office, 1960.
- U.S. Department of Labor. Educational Attainment of Workers. Special Labor Force Report No. 92: Washington, D.C.: U.S. Government Printing Office, 1967.
- U.S. Department of Labor. Employment of High School Graduates and Dropouts in 1966. Special Labor Force Report No. 85: Washington, D.C.: U.S. Government Printing Office, 1967.
- U.S. Department of Labor. Finding Jobs for Negroes. Monograph No. 9: Washington, D.C.: U.S. Government Printing Office, 1968.
- U.S. Department of Labor. Out-of School Youth--Two Years Later. Special Labor Force Report No. 71: Washington, D.C.: U.S. Government Printing Office, 1966.
- U.S. Department of Labor. The Negroes in the United States. Bulletin No. 1511: Washington, D.C.: U.S. Government Printing Office, 1966.
- U.S. Office of Programs for the Disadvantaged. Vocational Training - Employment and Unemployment: Part II--Profiles of States. Washington, D.C.: U.S. Government Printing Office, 1969.
- Venn, Grant. Man, Education and Work. Washington, D.C.: American Council on Education, 1964.
- Wolfbein, Seymour L. Employment, Unemployment and Public Policy. New York, N.Y.: Random House, 1966.

APPENDIX

OCCUPATIONAL TRAINING INFORMATION SYSTEM

1. NAME _____ 2. AGE _____ 3. SEX (CHECK ONE) M F
LAST FIRST MIDDLE

4. ARE YOU MARRIED (CHECK ONE) YES NO 5. SOCIAL SECURITY NUMBER (IF ANY) _____
ARE YOU MARRIED (CHECK ONE) YES NO SOCIAL SECURITY NUMBER (IF ANY)

6. PERMANENT ADDRESS (WHERE YOU CAN BE REACHED AFTER GRADUATION OR COMPLETION; PARENT'S HOME, ETC.)
NUMBER AND STREET CITY, TOWN, COMMUNITY STATE ZIP CODE

7. ARE YOU THE HEAD OF A HOUSEHOLD? YES NO 8. ARE YOU PHYSICALLY HANDICAPPED? YES NO

9. WHAT IS THE NAME OF THE HIGH SCHOOL YOU ARE NOW ATTENDING OR LAST ATTENDED? (IF ANY) _____

10. LOCATION OF HIGH SCHOOL LAST ATTENDED _____
CITY, TOWN, OR COMMUNITY STATE

11. WHAT PROGRAM ARE YOU NOW TAKING (EXAMPLE: VOCATIONAL CARPENTRY) _____

12. NAME OF SCHOOL OR INSTITUTION OFFERING THIS PROGRAM _____

13. EXPECTED DATE OF GRADUATION OR COMPLETION FROM THIS PROGRAM _____
MONTH YEAR

14. IN THIS PROGRAM, I AM NOW IN THE (CHECK ONE) FIRST YEAR SECOND YEAR THIRD YEAR FOURTH YEAR

15. WHO MOST INFLUENCED YOU TO ENROLL IN THIS PROGRAM? (CHECK ONE)
 RELATIVES HIGH SCHOOL PRINCIPAL HIGH SCHOOL COUNSELOR
 FRIENDS HIGH SCHOOL ACADEMIC TEACHER OTHER
 EMPLOYER VOCATIONAL TEACHER NOBODY

16. WHY DID YOU ENROLL IN THIS PROGRAM? (CHECK ONE) TO PREPARE FOR A JOB OTHER (SPECIFY) _____

17. HOW MANY YEARS OF SCHOOL DID YOU COMPLETE BEFORE ENTERING THIS PROGRAM?
ELEMENTARY OR HIGH SCHOOL
 4 OR LESS 5 6 7 8 9 10 11 12
COLLEGE
 1 2 3 4 MORE THAN 4

18. WHAT WERE YOU DOING BEFORE YOU FIRST ENROLLED IN THIS PROGRAM? (CHECK ONE)
 EMPLOYED FULL TIME (EXCEPT SUMMER EMPLOYMENT) GOING TO SCHOOL UNEMPLOYED (LOOKING FOR WORK)
 MILITARY OTHER

19. IF YOUR ANSWER TO QUESTION 18 WAS "EMPLOYED FULL TIME", WHAT WAS YOUR JOB CATEGORY? (CHECK ONE) (LEAVE BLANK OTHERWISE)
 PROFESSIONAL OR KINDRED WORKERS (INCLUDES ACCOUNTANTS, ENGINEERS, PERSONNEL WORKERS, ETC.)
 TECHNICIANS (DRAFTSMAN, ELECTRICAL TECHNICIAN, ETC.)
 MANAGERS, OFFICIALS, PROPRIETORS, FARM OWNERS, FARM MANAGERS
 CLERICAL WORKERS (INCLUDES BOOKKEEPERS, CASHIERS, STOREKEEPERS, ETC.)
 SALES WORKERS
 CRAFTSMAN, FOREMAN, AND KINDRED WORKERS (INCLUDES CARPENTERS, ELECTRICIANS, MACHINISTS, ETC.)
 OPERATIVES AND KINDRED WORKERS (INCLUDES APPRENTICES, ASSEMBLERS, TRUCK DRIVERS, DELIVERY MEN, WELDERS, ETC.)
 SERVICE WORKERS (INCLUDING PRIVATE HOUSEHOLD, JANITORS, GUARDS, ETC.)
 LABORER, (INCLUDING FARM)
 OTHER (SPECIFY) _____

20. IF EMPLOYMENT OPPORTUNITIES ARE EQUAL, DO YOU PLAN TO WORK IN OKLAHOMA WHEN YOU FINISH THIS PROGRAM?
 YES NO DON'T KNOW

OTIS SUPPLY FORM-2

<p>21. I AM PRESENTLY (CHECK ONE)</p> <p><input type="checkbox"/> ADULT-PREPARATORY MEANS PROGRAMS FOR ADULTS TO PREPARE THEM FOR GAINFUL EMPLOYMENT.</p> <p><input type="checkbox"/> ADULT-SUPPLEMENTARY MEANS PROGRAMS FOR ADULTS TO IMPROVE SKILLS OR TO ACQUIRE EXTRA SKILLS.</p>	<p><input type="checkbox"/> A HIGH SCHOOL FRESHMAN <input type="checkbox"/> IN POST HIGH SCHOOL FIRST YEAR</p> <p><input type="checkbox"/> A HIGH SCHOOL SOPHOMORE <input type="checkbox"/> IN POST HIGH SCHOOL SECOND YEAR</p> <p><input type="checkbox"/> A HIGH SCHOOL JUNIOR <input type="checkbox"/> IN ADULT-PREPARATORY TRAINING*</p> <p><input type="checkbox"/> A HIGH SCHOOL SENIOR <input type="checkbox"/> IN ADULT-SUPPLEMENTARY TRAINING*</p>
<p>22. WHICH DESCRIBES YOU? (CHECK ONE)</p>	<p><input type="checkbox"/> INDIAN <input type="checkbox"/> NEGRO <input type="checkbox"/> WHITE <input type="checkbox"/> MEXICAN AMERICAN</p> <p><input type="checkbox"/> ORIENTAL <input type="checkbox"/> OTHER</p>
<p>23. IN WHAT SIZE COMMUNITY DID YOU LIVE MOST OF YOUR LIFE BEFORE AGE 14? (CHECK ONE) (IF YOU DON'T REMEMBER, MAKE AN APPROXIMATION)</p>	<p><input type="checkbox"/> LESS THAN 2,500 POPULATION <input type="checkbox"/> 2,501 TO 10,000 POPULATION</p> <p><input type="checkbox"/> 10,001 TO 25,000 POPULATION <input type="checkbox"/> 25,001 TO 50,000 POPULATION</p> <p><input type="checkbox"/> OVER 50,000 POPULATION</p>
<p>24. WHAT WAS YOUR FAMILY'S PRIMARY SOURCE OF INCOME MOST OF YOUR LIFE BEFORE YOU WERE 14? (CHECK ONE)</p>	<p><input type="checkbox"/> FARMING <input type="checkbox"/> SELF EMPLOYED (NON AGRICULTURAL)</p> <p><input type="checkbox"/> WAGES OR SALARY <input type="checkbox"/> WELFARE</p> <p><input type="checkbox"/> OTHER <input type="checkbox"/> SAVINGS</p>
<p>25. EDUCATION OF FATHER OR HEAD OF HOUSEHOLD WHEN YOU WERE GROWING UP. (CHECK HIGHEST LEVEL ATTAINED)</p>	<p><input type="checkbox"/> 4TH GRADE OR LESS <input type="checkbox"/> GRADUATED FROM HIGH SCHOOL</p> <p><input type="checkbox"/> 5TH OR 6TH GRADE <input type="checkbox"/> SOME COLLEGE BUT NO DEGREE</p> <p><input type="checkbox"/> 7TH OR 8TH GRADE <input type="checkbox"/> ASSOCIATE DEGREE</p> <p><input type="checkbox"/> 9TH OR 10TH GRADE <input type="checkbox"/> BACCALAUREATE DEGREE</p> <p><input type="checkbox"/> 11TH OR 12TH GRADE (NON-GRADUATE) <input type="checkbox"/> GRADUATE WORK OR PROFESSIONAL DEGREE</p>
<p>26. OCCUPATION OF FATHER OR HEAD OF HOUSEHOLD WHEN YOU WERE GROWING UP? (CHECK ONE)</p>	<p><input type="checkbox"/> PROFESSIONAL OR KINDRED WORKERS (INCLUDES ACCOUNTANTS, ENGINEERS, PERSONNEL WORKERS, ETC.)</p> <p><input type="checkbox"/> TECHNICIANS (DRAFTSMEN, ELECTRICAL TECHNICIANS, ETC.)</p> <p><input type="checkbox"/> MANAGERS, OFFICIALS, PROPRIETORS, FARM OWNERS, FARM MANAGERS</p> <p><input type="checkbox"/> CLERICAL OR KINDRED WORKERS (INCLUDES BOOKKEEPERS, CASHIERS, STOREKEEPERS, ETC.)</p> <p><input type="checkbox"/> SALES WORKERS</p> <p><input type="checkbox"/> CRAFTSMEN, FOREMEN, AND KINDRED WORKERS (INCLUDES CARPENTERS, ELECTRICIANS, MACHINISTS, ETC.)</p> <p><input type="checkbox"/> OPERATIVES AND KINDRED WORKERS (INCLUDES APPRENTICES, ASSEMBLERS, TRUCK DRIVERS, DELIVERY MEN, WELDERS, ETC.)</p> <p><input type="checkbox"/> SERVICE WORKERS (INCLUDING PRIVATE HOUSEHOLD WORKERS, JANITORS, GUARDS, ETC.)</p> <p><input type="checkbox"/> LABORERS (INCLUDING FARM)</p> <p><input type="checkbox"/> OTHER (SPECIFY) _____</p>
<p>27. WHAT WAS THE APPROXIMATE ANNUAL INCOME OF THE HOUSEHOLD IN WHICH YOU LIVED LAST YEAR? (CHECK ONE)</p>	<p><input type="checkbox"/> UNDER \$3000.00 <input type="checkbox"/> \$ 9000.00 TO \$11999.00</p> <p><input type="checkbox"/> \$3000.00 TO \$4999.00 <input type="checkbox"/> \$12000.00 TO \$15000.00</p> <p><input type="checkbox"/> \$5000.00 TO \$6999.00 <input type="checkbox"/> OVER \$15000.00</p> <p><input type="checkbox"/> \$7000.00 TO \$8999.00</p>
<p>28. HOW MANY PEOPLE LIVED IN THE HOUSEHOLD REFERRED TO IN QUESTION NUMBER 27 ABOVE?</p>	<p>_____ (NUMBER)</p>

APPENDIX B

OTIS FOLLOW-UP QUESTIONNAIRE 1

Postage
Will Be Paid
by
Addressee

No
Postage Stamp
Necessary
If Mailed in the
United States



BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 284 STILLWATER, OKLAHOMA

TO:
OCCUPATIONAL TRAINING
INFORMATION SYSTEM
401 CLASSROOM BUILDING
STILLWATER, OKLAHOMA 74074



DEAR FRIEND,

WE, LIKE YOU, ARE PROUD OF THE TRAINING YOU RECEIVED IN YOUR OCCUPATIONAL PROGRAM. PLEASE LET US KNOW WHAT YOU ARE DOING AT THIS TIME BY COMPLETING THE FIVE QUESTIONS BELOW. THIS SHOULD TAKE NO MORE THAN A FEW MINUTES OF YOUR TIME. WE NEED THIS INFORMATION TO HELP AID YOU IN LATER JOB PLACEMENT AND TO KNOW HOW TO IMPROVE OUR PROGRAMS.

I. DID YOU COMPLETE THE OCCUPATIONAL PROGRAM IN WHICH YOU WERE ENROLLED? (CHECK ONE) YES NO

II. EMPLOYMENT STATUS (CHECK ONE ONLY)

- WORKING FULL TIME IN OCCUPATION FOR WHICH YOU WERE TRAINED IN THE OCCUPATIONAL TRAINING PROGRAM.
- WORKING FULL TIME IN OCCUPATION RELATED TO TRAINING RECEIVED.
- WORKING FULL TIME IN OCCUPATION NOT RELATED TO TRAINING RECEIVED.
- CONTINUING FULL TIME IN SCHOOL IN FIELD RELATED TO TRAINING.
- CONTINUING FULL TIME IN SCHOOL IN FIELD NOT RELATED TO TRAINING.
- ARMED SERVICES.
- EMPLOYED PART TIME, BUT NOT ATTENDING SCHOOL.
- UNEMPLOYED, SEEKING EMPLOYMENT.
- UNEMPLOYED, NOT SEEKING EMPLOYMENT.

III. IF EMPLOYED:

(a) WHAT IS YOUR JOB TITLE? _____
(EXAMPLES: NURSES AID, ELECTRONICS TECHNICIAN, ETC.)

(b) LOCATION OF JOB: _____
(CITY) (STATE) (ZIP CODE)

THANK YOU!

IV IF EMPLOYED WHAT IS YOUR YEARLY SALARY RANGE? (CHECK ONE)

- UNDER \$3,000
- \$3,001 - 4,000
- \$4,001 - 5,000
- \$5,001 - 6,000
- \$6,001 - 7,000
- OVER \$7,000

V HOW WOULD YOU RATE YOUR OCCUPATIONAL PROGRAM IN TERMS OF EMPLOYMENT BENEFITS TO YOU?

- (CHECK ONE) HIGH
 AVERAGE
 LOW
 NOT APPLICABLE

APPENDIX C

OTIS FOLLOW-UP QUESTIONNAIRE 2

Dear Friend:

You recently received a request for some information about a Home Economics, Agriculture, Distributive Education, Business, or Technical Course or Program you took in an Oklahoma public or private school. Your reply is urgently needed in our effort to improve Oklahoma's occupational education programs.

Take an additional moment to tear off and complete the attached card. If, however; you have already mailed the questionnaire, please disregard this reminder.

THANK YOU!

FIRST CLASS

Permit No.
284

Stillwater, Okla.

BUSINESS REPLY MAIL

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY:

OCCUPATIONAL TRAINING INFORMATION SYSTEM

401 CLASSROOM BUILDING

STILLWATER, OKLAHOMA 74074



- I. DID YOU COMPLETE THE OCCUPATIONAL PROGRAM IN WHICH YOU WERE ENROLLED? (CIRCLE ONE) 1. YES 2. NO
- II. EMPLOYMENT STATUS (CIRCLE ONE ONLY)
1. WORKING FULL TIME IN OCCUPATION FOR WHICH YOU WERE TRAINED IN THE OCCUPATIONAL TRAINING PROGRAM.
 2. WORKING FULL TIME IN OCCUPATION RELATED TO TRAINING RECEIVED.
 3. WORKING FULL TIME IN OCCUPATION NOT RELATED TO TRAINING RECEIVED.
 4. CONTINUING FULL TIME IN SCHOOL IN FIELD RELATED TO TRAINING.
 5. CONTINUING FULL TIME IN SCHOOL IN FIELD NOT RELATED TO TRAINING.
 6. ARMED SERVICES.
 7. EMPLOYED PART TIME, BUT NOT ATTENDING SCHOOL.
 8. UNEMPLOYED, SEEKING EMPLOYMENT.
 9. UNEMPLOYED, NOT SEEKING EMPLOYMENT.

III. IF EMPLOYED:

(a) WHAT IS YOUR JOB TITLE? _____
(Examples: Nurses Aid, Electronics Technician, etc.)

(b) LOCATION OF JOB: _____
(City) (State) (Zip Code)

IV. IF EMPLOYED WHAT IS YOUR YEARLY SALARY RANGE? (CIRCLE ONE)

1. UNDER \$3,000
2. \$3,001 - 4,000
3. \$4,001 - 5,000
4. \$5,001 - 6,000
5. \$6,001 - 7,000
6. OVER \$7,000

V. HOW WOULD YOU RATE YOUR OCCUPATIONAL PROGRAM IN TERMS OF EMPLOYMENT BENEFITS TO YOU? (CIRCLE ONE)

1. HIGH
2. AVERAGE
3. LOW
4. NOT APPLICABLE

№ 28311

DETACH AND MAIL THIS CARD

OCCUPATIONAL TRAINING INFORMATION SYSTEM

IN CO-OPERATION WITH
STATE DEPARTMENT OF VOCATIONAL-
TECHNICAL EDUCATION, AND ASSOCIATION
OF PRIVATE SCHOOLS

401 CLASSROOM BUILDING
STILLWATER, OKLAHOMA 74074

PLEASE FORWARD PROMPTLY

APPENDIX D

OTIS FOLLOW-UP QUESTIONNAIRE 3

Sock it to me |

We just gotta know how you are doing and how you feel about the program you were in.

Please help us improve that program by completing the attached card and hot footing it out to the mail box. Do it now and fill my Christmas stocking!

THANK YOU!

FIRST CLASS

Permit No.
284

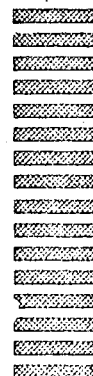
Stillwater, Okla.

BUSINESS REPLY MAIL

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY:

**OKLAHOMA STATE UNIVERSITY
OCCUPATIONAL TRAINING INFORMATION SYSTEM
401 CLASSROOM BUILDING
STILLWATER, OKLAHOMA 74074**



I COMPLETED THE OCCUPATIONAL PROGRAM IN WHICH I WAS ENROLLED:

- [1] Yes (Check one)
[2] No

I AM: (Check one)

- [1] Working full time in occupation for which I was trained.
[2] Working full time in occupation related to training received.
[3] Working full time in occupation not related to training received.
[4] Continuing full time in school in field related to training.
[5] Continuing full time in school in field not related to training.
[6] In armed services.
[7] Employed part time, but not attending school.
[8] Unemployed, seeking employment.
[9] Unemployed, not seeking employment.

IF EMPLOYED:

My job title is: _____
(Examples: Nurses Aid, Electronics Technician)

The location of my job is: _____
(City) (State) (Zip Code)

My yearly salary range:

- [1] Under \$3,000 (Check one)
[2] \$3,000 - 4,000
[3] \$4,000 - 5,000
[4] \$5,000 - 6,000
[5] \$6,000 - 7,000
[6] Over \$7,000

**I RATE MY OCCUPATIONAL PROGRAM
IN TERMS OF EMPLOYMENT BENEFITS AS:
(Check one)**

- [1] High
[2] Average
[3] Low
[4] Not applicable

OKLAHOMA STATE UNIVERSITY
OCCUPATIONAL TRAINING INFORMATION SYSTEM
IN CO-OPERATION WITH
STATE DEPARTMENT OF VOCATIONAL-
TECHNICAL EDUCATION, AND ASSOCIATION
OF PRIVATE SCHOOLS
401 CLASSROOM BUILDING
STILLWATER, OKLAHOMA 74074

PLEASE FORWARD PROMPTLY

APPENDIX E
RCU FOLLOW-UP CARD

JOHN DOE R00003241

PLEASE ANSWER ALL QUESTIONS IF STUDENT IS
NO LONGER IN YOUR PROGRAM. RETURN CARD
WITH NO ANSWERS IF STUDENT IS STILL IN
YOUR PROGRAM.

1. DID STUDENT COMPLETE PROGRAM?

Yes No

Don't
Know

2. DID STUDENT DEVELOP A MARKETABLE SKILL?

Yes No

Don't Know Not
Applicable

3. DID STUDENT TRANSFER TO ANOTHER
VOCATIONAL PROGRAM?

Yes No

Don't Know Not
Applicable

4. WHAT IS STUDENT'S PRESENT STATUS?

Armed Forces

Continuing School Full-time in
Related Vocational Field

Continuing School Full-time in
Non-Related Field

Not in Labor Force (Marriage,
Health, etc.)

Working in Occupation for Which
Trained (full-time)

Working in Occupation Related
to Training (full-time)

Working in Non-related
Occupation (full-time)

Working Part-time (Do not
include those in school)

Unemployed, Seeking Employment

Unknown

VITA

James Lee Harris

Candidate for the Degree of

Doctor of Education

Thesis: THE ENROLLMENT RATES, DROPOUT RATES AND ECONOMIC BENEFITS THAT CHARACTERIZE THE EXPERIENCE OF THE DISADVANTAGED IN OKLAHOMA'S OCCUPATIONAL TRAINING

Major Field: Higher Education

Biographical:

Personal Data: Born in Guthrie, Oklahoma, January 30, 1939, the son of Mr. and Mrs. Labron Eli Harris.

Education: Graduated from high school at Stillwater High School, Stillwater, Oklahoma, in 1957; received a Bachelor of Science degree from Oklahoma State University in 1961 with a major in mathematics; received a Master of Science degree from Oklahoma State University in 1968 with a major in Technical Education; completed requirements for a Doctor of Education degree in May, 1970.

Professional Organizations: Data Processing Management Association, Oklahoma Education Association, National Education Association, Oklahoma Technical Society, and Phi Delta Kappa.

Professional Experience: Mathematics instructor at Donart High School, Stillwater, Oklahoma, in the 1964-1965 school year; Data Processing instructor at the Oklahoma City Area Vocational-Technical Center, Oklahoma City, Oklahoma, in the 1966-1967 and 1967-1968 school years; Systems analyst for the Occupational Training Information System, Oklahoma State University from August 1968 to the present.