

AN ANALYSIS OF ADULT EDUCATION STUDENT
CHARACTERISTICS IN PREPARATORY
AND SUPPLEMENTARY TRAINING
PROGRAMS IN
OKLAHOMA

By

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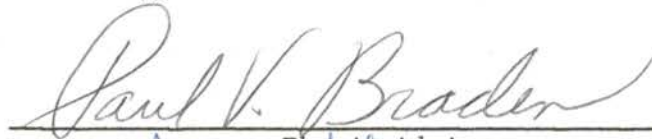
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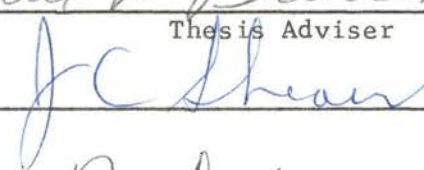
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Thesis Approved:



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CHAPTER I

INTRODUCTION

During the last decade, the nation has been emphasizing skill training and retraining as a mean to stimulate economic growth through a balancing of manpower demand and supply in the market place. It is very important to train and retrain capable men and women for future careers; but society must not neglect to give equal opportunities to undereducated or otherwise disadvantaged persons who are, or desire to be in the labor force and need vocational-technical training and retraining.

With regard to Oklahoma's public reimbursed occupational training, the statewide project entitled the Occupational Training Information System in Oklahoma by Braden with Harris, Martin, Paul, Pulliam, and Whatley (4, pp. 233-238), reports that the predominant enrollment, as is the case in most other states, is at the secondary level. Of total enrollment in 1969, secondary was 65 per cent, followed by 31.2 per cent for adult and 3.8 per cent for post secondary. Of total enrollment of adult (definition of adult in their study is same as in this study except the age of trainees being over 16 years of age) by instructional categories; 43.5 per cent for Trade and Industrial Education, 28.7 per cent for Distributive Education, 39.6 per cent for Technical Education and 54.4 per cent for Business and Office Education Programs.

However, education alone does not create jobs. It can only help reduce unemployment by matching individual skills and employer requirements with a recognition of the market forces in affecting changes in relative supply or demand excesses or deficiencies.

Statement of the Problem

Development of expanded programs of adult vocational-technical education has been impeded by a lack of information concerning important aspects such as social, personal and socioeconomic background characteristics of trainees in adult-preparatory and adult-supplementary programs. Administrators responsible for planning and implementing new and effective programs have limited experience in this field of education and often have misunderstood the unique aspects of adult vocational-technical education. The program planner for adult-preparatory and adult-supplementary training has trouble establishing effective curricula because of such things as lack of information about instructional materials, laboratory equipment needed and lack of data about the type of students to be served.

Simply stated, the problem of this study was concerned with providing needed information about characteristics of trainees in adult-preparatory and adult-supplementary programs in Oklahoma.

Purpose of this Study

The purpose of this descriptive study was to identify similarities and differences in social, personal, and socioeconomic background characteristics of trainees in adult-preparatory and adult supplementary programs. The factors used to determine these characteristics

were: age, marital status, occupational experience prior to entering the programs, selected size of community in which trainees grew up before trainees were age 14, educational attainment of trainees prior to entering the programs, specific source of information about vocational-technical education programs, annual income of trainees who are heads of a household and have worked as full-time employees prior to entering the programs, expected geographic mobility, reason for entering the programs, trainee's parents primary source of income before trainees were age 14, and comparative participation rates at different levels of educational establishments in Oklahoma (junior high school, high school, junior college, university related technical institute).

Need for the Study

During recent years, many researchers have completed projects in the field of vocational-technical education and many important findings have been published concerning vital areas in the field, e.g., socio-economic background of students, financing, program planning, program evaluation, and teacher training. However, most of these research projects have been done on full-time day students at the post-high school level of training and retraining, and have neglected intensive study on adult training at different levels of educational establishment in Oklahoma.

A study by Parnes, Fleisher, Miljus, Spitz and their associates, which deals with the 45-59 years age group (14, p. 2) states:

An important reason for studying the 45-49 year age group of male workers is that they tend to have special problems in

the labor market. For example, although their unemployment rates are no higher than those of younger men, they comprise a disproportionately larger share of the long-term unemployed. Although it is commonly recognized that re-employment prospects of member of this group, once they lose their job, they are more limited than younger workers, little is known about why some of them are able to adapt successfully to labor market changes, while others are not. Education and skill level, of course, are known to be important factors in this context; but it is also known that not all of the poorly educated and unskilled become or remain unemployed. There is need to explore such differences in adaptation in terms of worker characteristics that have hitherto been largely ignored in large-scale samples of the national population.

The study of adult trainee's characteristics in adult-preparatory and adult-supplementary programs in Oklahoma will be useful in planning meaningful training and retraining for future years. It is, also, expected that this study will provide information which would be useful in the design of additional research in this area.

Research Questions

The following four research questions were formulated for consideration in the study:

Question 1. Is there a difference in the average age of trainees in adult-preparatory and adult-supplementary programs?

Question 2. Do trainees in adult-preparatory and adult-supplementary programs have different social background characteristics?

Question 3. Do trainees in adult-preparatory and adult-supplementary programs come from different socioeconomic backgrounds?

Question 4. Is there a difference in comparative participation rates of trainees at different levels of educational establishments between adult-preparatory and adult-supplementary programs?

Hypotheses

Each of the following null hypotheses were formulated and tested against nineteen statements from the OTIS Supply Form II, a questionnaire (Appendix A), concerning characteristics of trainees in adult-preparatory and adult-supplementary programs.

The specific null hypotheses tested were as follows:

- (1) There is no significant difference in student enrollment between adult-preparatory and adult-supplementary training programs.
- (2) There is no significant difference in age distribution between adult-preparatory and adult-supplementary trainees.
- (3) There is no significant difference in adult-preparatory and adult-supplementary trainee's marital status.
- (4) There is no significant difference in occupational experience of adult-preparatory and adult-supplementary trainees prior to entering the programs.
- (5) There is no significant difference in size of community in which adult-preparatory and adult-supplementary trainees grew up before trainees were age 14.
- (6) There is no significant difference in educational attainment between adult-preparatory and adult-supplementary trainees prior to entering the programs.
- (7) There is no significant difference in the source of information about vocational-technical education programs for adult-preparatory and adult-supplementary trainees.

- (8) There is no significant difference in annual income between adult-preparatory and adult-supplementary trainees who are heads of household and worked as full-time employee prior to entering the programs.
- (9) There is no significant difference in expected geographic mobility of adult-preparatory and adult-supplementary trainees after the completion of programs.
- (10) There is no significant difference in family's primary source of income of adult-preparatory and adult-supplementary trainees before the trainees were age 14.
- (11) There is no significant difference in reason of adult-preparatory and adult-supplementary trainees for entering programs.
- (12) There is no significant difference in comparative participation rates of adult-preparatory and adult-supplementary trainees at different levels of educational establishments.
- (13) There is no significant difference in socioeconomic background of adult-preparatory and adult-supplementary trainees who are heads of household and worked as full-time employee prior to entering in programs.

Scope of the Study

This study was limited to male students who are age 21 and over and enrolled in either an adult-preparatory or adult-supplementary training program in either private or public vocational-technical schools for the first semester of the 1968-1969 school year. Total number of subjects utilized in this study were 2149 students.

Institutions included in the study were the 11 private and the 24 public vocational-technical schools in Oklahoma which offered adult-preparatory and adult-supplementary training programs. Types of institutions in the study consisted of one junior high school, seven high schools, six area vocational-technical schools, five junior colleges, four university related technical institutes, and eleven post-high school private vocational-technical schools in Oklahoma (Appendix B).

Assumptions

The design of this study was based upon the assumption that the trainees presently enrolled in adult-preparatory and adult-supplementary programs would be similar to the trainees who would enroll in adult-preparatory and adult-supplementary training programs in future years.

The validity of this assumption is supported by the work of Astin (1, p. 51). He cites several studies which show that the characteristics of students at an institution remain stable over a period of years. An additional assumption of this study is that the trainees will give accurate responses to all questions necessary to the study.

Definitions of Terms

Adult Vocational Education--Instruction offered day or evening to trainees (the reference to trainee means an adult or out-of-school youth over 21 years of age who is engaged in or is preparing to enter an occupation). Vocational education for adults is chiefly of an

upgrading and updating nature, offered on a part-time basis, or of a retraining nature for persons displaced by automation or technological changes.

Adult-Preparatory--Programs to prepare trainees for gainful employment.

Adult-Supplementary--Programs for adults to improve skills or to acquire extra skills.

Area Vocational School or Program--A school or program involving a large geographical territory usually including more than one local basic administrative unit. It offers specialized training to high school students who are preparing to enter the labor market. It also provides vocational or technical education to persons who have completed or left high school and are available for full-time study. These schools are sponsored and operated by local communities or by the state. (7)

Distributive Education-- A program that includes various combinations of subject matter and learning experiences related to the performance of activities that direct the flow of goods and services, including their appropriate utilization, from the producer to the consumer or user. (17, p. 411)

Evening School--An institution that offers an organized program of courses for the convenience of adult students. Classes are held during the non-working hours of employed persons. (7)

Follow-Up Study, Vocational--A survey to determine what occupations the students and graduates of vocational education courses enter and how effective their training was in relationship in actual needs of the job. (7)

Geographic Mobility--A movement from place to place. (21, p. 86)

Interstate Migration--A movement from one state to another.

Junior College--An institution of higher education which offers the first two years of college instruction, frequently grants an associate degree, and does not grant a bachelor's degree. Offerings include transfer and/or terminal programs (with an immediate employment objective) at the post-secondary instructional level and also may include adult education programs. It is an independently organized institution (public or non-public) or an institution which is part of the public school system or an independently organized system of junior colleges. (7)

Migration--The voluntary movement of individuals beyond and outside their state of residence. (3, p. 25)

Mobility--A quality of flexibility, adjustability and freedom of movement among labor markets. (21, p. 82)

Office Occupational Education--This body of subject matter or combinations of courses and practical experience is organized into programs of instruction to provide opportunities for pupils to prepare for and achieve career objectives in selected office occupations. (17, p. 541)

Out-of-School Youth--Persons under 21 years of age, excluding children below school age, who (a) are not full-time elementary or secondary school pupils or under the provisions of compulsory attendance and (b) are not considered to be an out-of-school youth when he is not attending school during a vacation period.

Post-Secondary Instructional Level--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. (17, p. 679)

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

(7)

Retraining Programs--A program which provided an occupational changing type of instruction serving to prepare persons for entrance into a new occupation or to instruct workers in new, different skills demanded by technological changes. (7)

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

(7)

Trade and Industrial Occupation Education--The 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. (17, p. 585)

Upgrading or Updating Training--Supplemental or extension training for the purpose of advancement or improving a worker's efficiency.

(7)

CHAPTER II

REVIEW OF THE LITERATURE

In this chapter the review of the literature for this study will emphasize the characteristics of trainees in vocational-technical education programs. During the course of the review of the literature, it was found that there were very limited studies done on the characteristics of adult-trainees in vocational-technical education programs. However, there were limited studies done on the characteristics of vocational-technical education students with emphasis on the day full-time students. The majority of research studies in this field tend to examine the student's characteristics in terms of individual or part of vocational-technical education programs. In addition, there are almost no studies done on the characteristics of trainees in private vocational-technical education programs. Therefore, the review of the literature will be centered on the general characteristics of trainees and retrainees in both experiences in formal and informal educational establishments. Before the major characteristics are discussed, it seems appropriate to mention aspiration as a minor characteristic.

Aspirations

In Burchinal's study (6, pp. 107-121) data showed farm boys holding the lowest levels of educational and occupational aspirations,

and metropolitan boys having the highest levels of educational and occupational aspirations. Planning to farm had a depressing effect on aspirational levels. In fact, aspirational levels of non-farm oriented, farm-reared boys approximated those of rural non-farm and small-town boys.

Middleton and Origg's study (11, pp. 347-355) reports similar findings in a Florida study. In this study white males from urban communities were more likely to have high educational and occupational aspirations than those from rural areas. In the case of white females there was a significant rural-urban difference in educational aspirations but not in occupational aspirations.

General Characteristics of Technical Education Students

Henninger's study (8, pp. 57-58) reports that one of the prominent characteristics of the technical institute student body is that of being daytime students exclusively. There are, however, a few institutions which offer technical institute curricular programs in the evening. The number of students enrolled and number of such programs were small in comparison with daytime programs. However, except for the very few cases indicated, instruction given to evening students is predominantly large in the vocational-trade type program and many involve cooperation, locally or regionally, with other educational institutions.

The average median, mean and range of age at entrance was reported as follows: median, 19 years; mean, 20 years; range, 18 to 27 years. Of the 93 institutions reporting this data, 69 were in the 18-to-20 years bracket and 19 in the 21-23 years bracket. With regard to age

of entering students, Phillips' study (15, p. 52) included reports that the metropolitan technical institute had the highest percentage of students at the age of 20 or over. The percentages for this category were: junior college, 8 per cent; vocational-technical school, 28 per cent; metropolitan technical institute, 35 per cent; and on-campus technical institute, 30 per cent. In different types of schools the range was: junior college, 17 to 35 years; vocational-technical school, 17 to 39 years; metropolitan technical institute, 17 to 35 years; and on-campus technical institute, 17 to 37 years.

With regard to marital status of students, Von Stroh (18, p. 261) reports that considerably more students at Oklahoma State Tech were married than at other institutions in the Oklahoma state system of higher education. Only 51.9 per cent of the graduate and 57.3 per cent of the dropouts were single. A similar study by Phillips (15, p. 54) reports that the metropolitan technical institute and the vocational-technical school served a higher percentage of married students than the other two institutions. Of the four institutions, the junior college technical education programs served the smallest percentage of married students.

With regard to educational attainment of entering students, Phillips (15, p. 54) reports that at all institutions a majority of the entering students had finished high school prior to enrolling in the technical programs. At the junior college all entering technical education students had finished high school. Percentages for the vocational-technical school, metropolitan technical institute, and on-campus technical institute were 97, 98, and 99 percent, respectively. In addition to being high school graduates, a number of the entering

students had completed some college credit prior to enrollment in the technical education programs. By institution these percentages were: junior college, 13 per cent; vocational-technical school, 14 per cent; metropolitan technical institute, 26 per cent; and on-campus technical institute, 35 per cent.

Miller's study (13, pp. 181-192) summarized the following essential factors of technical institute students:

- (a) He must be at least average in term of academic ability;
- (b) He must have at least an average ability in mathematics and science with genuine interest in the practical application of these skills in some specific field of technology;
- (c) He must be a person who can form judgements and function effectively without excessive reliance on others.

General Characteristics of the Retrainees

In the research study done by Weber (19, pp. 266-267) he indicates that there are significant differences existing in the personal and labor market characteristics of the particular trainee groups. This study was done on five cities in the United States. Selections of trainees were different in each city. In Chicago, Omaha, and Fort Worth, the composition of the training group largely reflected the qualities of specific constituencies served by the agencies providing the training opportunities. In Carbondale and Murphysboro, Illinois, the dominate consideration was the criteria for selection applied by the local Employment Service office and employer. In both cases, the emphasis was on the younger, better educated workers. Over 60 per cent of the trainees were under 30 years of age and over 80 per cent were less than 40 years of age. Similarly, all of the trainees had

more than seven years of education, while approximately 80 per cent had been in school for ten years or more. This study concluded that the characteristics of the trainees are of considerable significance when related to the general occupational orientation of the particular training programs. Weber noted that (19, p. 268):

The quality of the trainees in terms of age, education, and previous work history tended to be highest in Carbondale and Murphysboro where almost all the jobs were semiskilled in nature and source were actually unskilled by the usual standards. Conversely, training in several skilled occupations were provided in Omaha and Fort Worth, where the overall quality of the participants was low. In Chicago, low level training was associated with limited education and work experience.

Geographic Mobility

In Weber's study (19, p. 284) he states:

Occupational retraining will increase geographical mobility. The reasoning is direct and intrinsically plausible. Once an unemployed worker acquires new skills, he has considerable incentive to use the skills in gainful employment. Therefore, if he does not obtain a job in his local labor market, he is likely to move to other areas in search of employment opportunities. In addition, the retrained job seeker may now feel that he has a marketable skill to offer so that the expectation of employment will be enhanced if he moves.

Pertaining to geographical mobility of professional and technical manpower, the research study by Ledinsky, (9, p. 475) indicated that professional, technical, and kindred workers are the fastest growing segment of the labor force. Evidence from 1960 Census reveals that they are nearly twice as migratory as any other occupational stratum.

Research study done by Malm (10, p. 479) supported Ledinsky's findings when he said, "...Professional and Technical workers are the most mobile segment of the labor force."

With regard to out-of-state migration of recent Oklahoma technician graduates, Bates (2, p. 84) reports that the difference in employment practices which were demonstrated by the employers from Oklahoma and from out-of-state did tend to affect interstate migration among the technician graduates of the associate degree program in Oklahoma's junior colleges and technical institutes.

Socioeconomic Background

In Bredifield's study (5, pp. 123-129), he concluded that relatively few psychological differences were found between students from low-income backgrounds and other differences were such as to logically favor the adjustment of the controlled students over that of the student from the low-income background. Therefore, the findings which showed the work study group to be performing academically as well, or slightly better than the controlled group at the end of one semester, was unexpected.

In Phillip's study (15, p. 102) he reports that:

Differences among the group were found on each of six factors related to socioeconomic background. Differences among the mean socioeconomic background scores were found to be significantly different at the .01 level. By examining the differences between all pairs of mean, two significant differences were found. Mean score for technical institute group were found to be significantly higher than the mean scores for the vocational-technical group and junior college group approached significant at the .05 level. These data indicate that the vocational technical school students came from lower socioeconomic backgrounds than did students at the other three institutions.

CHAPTER III

THE METHODOLOGY

The purpose of this descriptive study was to identify differences and similarities in social, personal and socioeconomic background characteristics of trainees in adult-preparatory and adult-supplementary programs in Oklahoma.

A study of the literature revealed little information concerning characteristics of adult-preparatory and adult-supplementary trainees. Therefore, this study serves to identify twelve characteristics thought to be important for educational planning and guidance for adult students.

OTIS Supply Form II, a questionnaire, was the instrument used to collect trainee characteristics information (Appendix A).

The subjects in this study were male trainees over 21 years of age who were enrolled in adult-preparatory or adult-supplementary training programs in Oklahoma. Of the 57,710 students enrolled in Oklahoma's vocational-technical education programs by the OTIS research project August 20, 1969, 4,221 or 13.7 per cent were over 21 years of age and 2,149 of the 4,221 adult students were enrolled in adult-preparatory and adult-supplementary training programs. The distribution of trainees by types of training programs was 1,022 adult-preparatory and 1,127 adult-supplementary trainees. Each of 2,149 trainees completed the OTIS Supply Form II. In a number of cases when individual items were examined the total number of respondents was less than 2,149.

This was primarily a result of the respondent either omitting the item or marking more than one choice. Data received from the 2,149 students was examined in relation to the four basic research questions and hypothesis. Statistical tests and conclusions arrived at are presented later in this paper.

Description of Schools and Training Programs

Thirty-five institutions included in this study were:

- (1) 11 non-residential, privately supported vocational-technical schools
- (2) 5 residential, publicly supported junior colleges
- (3) 1 non-residential, publicly supported metropolitan technical institute
- (4) 3 residential, publicly supported technical institutes located at Oklahoma State University in Stillwater, Okmulgee, and Langston University
- (5) 7 non-residential, publicly supported area vocational schools
- (6) 7 non-residential, publicly supported high schools
- (7) 1 non-residential, publicly supported junior high school

The selection of these institutions was based upon to include all institutions in Oklahoma which has established adult-preparatory or adult-supplementary training in vocational-technical education programs.

The universities, colleges, and high schools used in the study are fully accredited by the North Central Association of Colleges and Secondary Schools. All private schools in the study are accredited by Oklahoma State Accrediting Agency for Veteran's and War Orphan's education under chapter 34 and 35, United State Code, Title 38, Veteran's Benefits.

Socioeconomic Background

A social class position was assigned to each subject. As stated A. J. Miller in his doctoral dissertation (12, pp. 31-34), the two major divisions for ranking of socioeconomic position are income and education as related to an occupational category. This scale, Edward's Social Economic Grouping of Occupations which was based on the most widely used scale of socioeconomic grouping of workers in the United States, is the basis on which the United States Census is made. The parameters enable a generalization to be made with reasonable confidence. Therefore, in this study social class position of adult student who is head of a household and have worked as full-time employee was determined by the adult student's occupational experience, educational attainment, and annual income. These three divisions were combined for making categorical assignment as follows:

Class I. This class represents highest occupational level, highest annual income, and highest educational attainment by the adult student. For a subject to be in this class, he worked in professional, proprietary or managerial capacity.

Class II. This class represents a category of combinations which includes all persons not in Class I or III. Therefore, whenever all three divisions (subject's educational attainment, occupation, and annual income) are not at either the highest level or lowest level, the subject is placed in Class II.

Class III. This class represents lowest occupational level, lowest annual income, and lowest educational attainment by the adult student. For a subject to be in this class, he worked as a craftsman, operative, service worker, laborer, etc. The annual income is less than \$6,999. The adult student did not go beyond high school.

Factors and combinations of factors which determined social class assignments are shown in Table I and II.

TABLE I

FACTORS DETERMINING SOCIAL CLASS ASSIGNMENT

	Head of a Household's Occupation	Head of a Household's Annual Income	Educational At- tainment by Head of a Household
A	Professional Manager	\$9,000 up	Some college work beyond high school
B	Clerical Sales	\$7,000 to \$8,999	High school graduate
C	Craftsman Operative Laborer	\$0 to \$6,999	No work beyond high school

TABLE II

COMBINATIONS OF FACTORS DETERMINING
SOCIAL CLASS ASSIGNMENTS

<u>Social Class Assignment</u>	<u>Combination of Factors</u>		
	Head of Household Occupation	Income	Education
Class III	C	C	C
Class II	A	A	C
	A	B	A
	A	B	C
	A	C	A
	A	C	C

TABLE II (Continued)

<u>Social Class Assignment</u>	<u>Combination of Factors</u>		
	Head of Household Occupation	Income	Education
	B	A	A
	B	A	C
	B	B	A
	B	B	C
	B	C	A
	B	C	C
	C	A	A
	C	A	C
Class I	A	A	A

Population

The subjects utilized in this study were selected from 35 institutions applying two criteria. Each trainee had to be enrolled in one of the adult-preparatory and adult-supplementary training programs in the first semester of the 1968-1969 school year, and had to be a male trainee over 21 years of age.

Instrument

OTIS Supply Form II, a questionnaire, was used to collect the information relating to social, personal, and socioeconomic background characteristics of trainees in Oklahoma's institutions.

Data Collection

This study was a part of the overall study entitled "The Design and Implementation of a State Occupational Training Information System (OTIS) Based on the Need of Oklahoma".

Data collection in this study on the sub-professional occupational programs utilizing OTIS Supply Form II was completed for the most part between October 1, 1968 and December 15, 1968. These data were selected in order to gather participant student data before any major influence on student's attitudes took place and after program enrollment mistakes had been corrected. The OTIS II instrument was administered primarily through the State Department of Vocational-Technical Education and Association of Oklahoma Private Schools.

Statistical Method

To test the null hypotheses the chi-square test represents a useful method of comparing experimentally measured value with those to be expected theoretically on hypotheses. The chi-square test was selected because the data was not of equal intervals yet meets the minimum assumptions for these statistics. This method requires that one criteria form table rows(R) and the other table columns(C). A cell of the table is formed by the intersection of a particular row and a particular column. The content of a cell is determined by counting the numbers of the sample which belong in that row and that column. This is called the observed value of the cell. The expected value in a cell is determined by multiplying the number of elements in the sample by an element in the cell. The difference between the expected value

and the actual value squared and divided by the expected value is defined as the contribution of the cell. The sum of all cell contribution is defined as a chi-square value of the criteria comparison.

In this particular study it was wise to use the adjusted chi-square method. According to Steel and Torrie (16, pp. 357-358), whenever a researcher desires to have the better approximation of chi-square it is suggested that he combine the small cells together and use the adjusted chi-square distribution and thus be able to obtain a more exact probability value from the chi-square table. Yates has proposed a correction for continuity applicable when the criterion has a single degree of freedom. This correction is intended to make the actual distribution of the criterion, as calculated from discrete data, more nearly like the chi-square distribution based on normal deviates. The approximation calls for the absolute value of each deviation to be decreased by $\frac{1}{2}$.

$$\text{Adjusted } X^2 = \frac{(|\text{Observed value} - \text{Expected Value}| - \frac{1}{2})^2}{\text{Expected value}}$$

Thus, adjustment results in a lower chi-square.

CHAPTER IV

ANALYSIS OF DATA

The purpose of this study was to identify differences and similarities in characteristics of trainees between adult-preparatory and adult-supplementary training programs and comparative participation rates of trainees at different levels of educational establishments. The analysis of data are presented in this chapter. Conclusions and recommendations based upon these results are also presented in this paper.

The analysis is presented in two sections. First, data concerning selected personal and social background factors concerning trainees are presented and in the second section, consideration is given to the socioeconomic background of trainees.

Methods of Presentation of Results with Regard to Hypothesis

The test results of hypothesis are divided into two areas of interest, (a) the chi-square approximation, the chi-square test on null hypothesis, and characteristics of trainees, and (b) a table giving actual cell values and percentage of N's in each cell.

Testing of Null Hypothesis on
Personal Social Attributes

Null Hypothesis I

There is no significant difference in student enrollment between adult-preparatory and adult-supplementary training programs.

Results

The chi-square approximation (d.f. = 3) was 120.93, which indicates that there was significant difference in student enrollment between adult-preparatory and adult-supplementary training programs at .05 level. The largest percentage of trainees are in Trade and Industrial Education Program. The percentage distribution was 63.4 per cent for adult-preparatory and 40 per cent for adult-supplementary training programs.

TABLE III

ENROLLMENT BY THE TYPE OF TRAINING PROGRAM

Program Area	Trainees in Adult-Preparatory Training (N=1,022)		Trainees in Adult-Supplementary Training (N=1,127)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
Distributive Education	26	2.3	99	8.8
Office Occupation Education	139	13.6	253	22.4

TABLE III (Continued)

Program Area	Trainees in Adult-Preparatory Training (N=1,022)		Trainees in Adult-Supplementary Training (N=1,127)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
Technical Education	219	21.4	324	28.7
Trade and Industrial Occupation Education	638	62.4	451	40.0
Total	1,022	99.9*	1,127	99.9*

*Discrepancy due to rounding off to nearest tenth percent.

Null Hypothesis II

There is no significant difference in age distribution between adult-preparatory and adult-supplementary trainees.

Results

The chi-square approximation (d.f. = 7) was 189.8, which indicates that there was significant difference in age distribution between adult-preparatory and adult-supplementary trainees at .05 level. The largest percentage of trainees were in the 21-25 age bracket. The percentage distribution was 62.9 per cent for adult-preparatory and 33.5 per cent for adult-supplementary training programs.

TABLE IV

AGE DISTRIBUTION OF TRAINEES BY THE TYPE OF TRAINING PROGRAM

Age Bracket	Trainees in Adult-Preparatory Training (N=1,022)		Trainees in Adult-Supplementary Training (N=1,127)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
21-25	643	62.9	377	33.5
26-30	189	18.9	332	29.5
31-35	84	8.2	194	17.2
36-40	47	4.6	94	8.3
41-45	23	2.3	61	5.4
46-50	14	1.4	33	2.9
51-55	11	1.1	25	2.2
Over 56	11	1.1	11	0.9
Total	1,022	100.5*	1,127	99.9*

*Discrepancy due to rounding off to nearest tenth percent.

Average Age for Adult-Preparatory = 26.7

Average Age for Adult-Supplementary = 30.2

Null Hypothesis III

There is no significant difference in adult-preparatory and adult-supplementary trainee's marital status.

Results

The chi-square approximation (d.f. = 1) was 98.83, which indicates that there was significant difference in adult-preparatory and adult-supplementary trainees' marital status at .05 level. The majority of

students was married. The percentage distribution was 60.2 per cent for adult-preparatory and 79.8 per cent for adult-supplementary training programs.

TABLE V

MARITAL STATUS OF TRAINEES BY THE TYPE OF TRAINING PROGRAM

Marital Status	Trainees in Adult-Preparatory Training (N=1,018)		Trainees in Adult Supplementary Training (N=1,117)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
Married	613	60.2	893	79.9
Single	405	39.8	224	20.1
Total	1,018	100.0	1,117	100.0

Null Hypothesis IV

There is no significant difference in occupational experience of adult-preparatory and adult-supplementary trainees prior to entering the programs.

Results

The chi-square approximation (d.f. = 8) was 113.75, which indicates that there was significant difference in occupational experience of adult-preparatory and adult-supplementary trainees prior to entering the programs at .05 level. The largest percentage of trainees

were engaged in semi-skilled occupational categories. The percentage distribution was 49.8 per cent for adult-preparatory and 33.2 per cent for adult-supplementary training programs.

TABLE VI

OCCUPATIONAL EXPERIENCE OF TRAINEES PRIOR TO ENTERING
THE PROGRAMS BY THE TYPE OF TRAINING PROGRAM

Previous Occupation of Adult Student	Trainees in Adult-Preparatory Training (N=1,018)		Trainees in Adult-Supplementary Training (N=1,117)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
Professional or Kindred Workers	19	5.3	120	17.3
Technicians	27	7.6	126	18.2
Managers, Officials, Proprietors and Farm	20	5.6	64	9.2
Clerical Workers	32	8.9	54	7.8
Sales Workers	17	4.8	59	8.5
Craftsman, Foreman, and Kindred Workers	75	21.1	151	21.8
Operatives and Kindred Workers	102	28.7	79	11.4
Service Workers	11	3.1	12	1.7
Laborer	53	14.9	27	3.9
Total	356	100.0	692	99.8*

*Discrepancy due to rounding off to nearest tenth percent.

Null Hypothesis V

There is no significant difference in size of community in which adult-preparatory and adult-supplementary trainees grew up before trainees were age 14.

Results

The chi-square approximation (d.f. = 4) was 0.845, which indicates that there was no significant difference in a size of community in which adult-preparatory and adult-supplementary trainees grew up before trainees were age 14 at .05 level. The largest percentage of trainees grew up in size of a community with less than 2500 population. The percentage distribution was 31.8 per cent for adult-preparatory and 31 per cent for adult-supplementary training program.

TABLE VII

SIZE OF COMMUNITY IN WHICH TRAINEES GREW UP BEFORE
AGE 14 BY THE TYPE OF TRAINING PROGRAM

Size of Community Population	Trainees in Adult- Preparatory Training (N=1,006)		Trainees in Adult- Supplementary Training (N=1,124)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
Less than 2,500	320	31.8	349	31.0
2,501 to 10,000	517	15.6	190	16.9
10,001 to 25,000	178	17.7	193	17.2

TABLE VII (Continued)

Size of Community Population	Trainees in Adult- Preparatory Training (N=1,006)		Trainees in Adult- Supplementary Training (N=1,124)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
25,001 to 50,000	111	11.0	120	10.7
Over 50,000	240	23.9	272	24.2
Total	1,006	100.0	1,124	100.0

Null Hypothesis VI

There is no significant difference in educational attainment between adult-preparatory and adult-supplementary trainees prior to entering the programs.

Results

The chi-square approximation (d.f. = 6) was 75.37, which indicates that there was significant difference in educational attainment between adult-preparatory and adult-supplementary trainees prior to entering the programs. The majority of trainees have attained 9th-11th grade education prior to entering the programs. The percentage distribution was 71.3 per cent for adult-preparatory and adult-supplementary training programs.

TABLE VIII

EDUCATIONAL ATTAINMENT OF TRAINEES PRIOR TO ENTERING THE
PROGRAMS BY THE TYPE OF TRAINING PROGRAM

Educational Attainment	Trainees in Adult Preparatory Training (N=1,022)		Trainees in Adult-Supplementary Training (N=1,009)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
4th-8th	26	2.5	17	1.6
9th-11th	733	71.3	683	63.0
High School Diploma	118	11.5	93	8.6
Some College	68	6.6	95	8.8
Associate Degree	36	3.5	50	4.6
B.S. or B.A.	35	3.4	71	6.6
Graduate Work	12	0.9	76	7.0
Total	1,028	99.7*	1,085	100.2*

*Discrepancy due to rounding off to nearest tenth percent.

An average educational attainment of trainees in adult-preparatory and adult-supplementary was 9th-11th grade.

Null Hypothesis VII

There is no significant difference in source of information about vocational-technical education programs for adult-preparatory and adult-supplementary trainees.

Results

The chi-square approximation (d.f. = 5) was 72.68, which indicates that there was significant difference in source of information about vocational-technical education programs for adult-preparatory and adult-supplementary trainees at .05 level. The majority of trainee's responses marked "Nobody." The percentage distribution was 53.6 per cent for adult-preparatory and 60.9 per cent for adult-supplementary training programs.

TABLE IX

INFORMATION SOURCE ABOUT VOCATIONAL-TECHNICAL EDUCATION
PROGRAMS FOR TRAINEES BY THE TYPE OF TRAINING PROGRAM

Source of Information	Trainees in Adult-Preparatory Training (N=824)		Trainees in Adult-Supplementary Training (N=1,003)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
Relatives	105	12.7	68	6.7
Friends	167	20.3	142	14.2
Employer	67	8.1	167	16.7
Nobody	442	53.6	611	60.9
High School Principal Counselor				
High School Academic Teacher	14	1.7	6	0.6
Vocational Teacher	29	3.5	9	0.9
Total	824	99.9*	1,003	100.0

*Discrepancy due to rounding off to nearest tenth per cent.

Null Hypothesis VIII

There is no significant difference in annual income between adult-preparatory and adult-supplementary trainees who are heads of household and worked as full-time employee prior to entering the programs.

Results

The chi-square approximation (d.f. = 6) was 131.7, which indicates that there was significant difference in annual income between adult-preparatory and adult-supplementary trainees who are heads of a household and worked as full-time employees prior to entering the programs at .05 level. The largest percentage of trainee's annual income was in the \$5000-\$6999 income bracket. The percentage distribution was 30.2 per cent for adult-preparatory and 25.1 per cent for adult-supplementary training programs.

TABLE X

APPROXIMATE ANNUAL INCOME OF TRAINEES WHO ARE HEADS
OF A HOUSEHOLD AND HAVE WORKED AS FULL-TIME
PRIOR TO ENTERING PROGRAMS BY THE TYPE OF
TRAINING PROGRAM

Annual Income	Trainees in Adult Preparatory Training (N=632)		Trainees in Adult- Supplementary Training (N=629)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
Under \$3,000	92	14.6	27	4.3
\$3,000-\$4,999	133	21.0	55	8.7
\$5,000-\$6,999	191	30.2	158	25.1
\$7,000-\$8,999	120	18.9	153	24.3

TABLE X (Continued)

Annual Income	Trainees in Adult- Preparatory Training (N=632)		Trainees in Adult- Supplementary Training (N=629)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
\$9,000-\$11,999	53	8.4	150	23.8
\$12,000-\$15,000	23	3.6	52	8.3
Over \$15,000	20	3.2	34	5.4
Total	632	99.9*	629	99.9*

*Discrepancy due to rounding off to nearest tenth percent.

An average annual income of trainees in adult-preparatory was \$3,000-\$4,999 income bracket and \$5,000-\$6,999 income bracket in adult-supplementary trainees.

Null Hypothesis IX

There is no significant difference in expected geographic mobility of adult-preparatory and adult-supplementary trainees after completion of the programs.

Results

The chi-square approximation (d.f. = 2) was 46.86, which indicates that there was significant difference in expected geographic mobility of adult-preparatory and adult-supplementary trainees after the completion of programs at .05 level. The largest percentage of trainees will stay in Oklahoma if employment opportunities are equal to other states. The percentage distribution was 43.8 per cent for adult-preparatory and 58.7 per cent for adult-supplementary training programs.

TABLE XI

EXPECTED GEOGRAPHICAL MOBILITY OF TRAINEES AFTER THE COMPLETION
OF TRAINING PROGRAMS BY THE TYPE OF TRAINING PROGRAM

Mobility	Trainees in Adult- Preparatory Training (N=1,012)		Trainees in Adult- Supplementary Training (N=1,110)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
Stay in Oklahoma	443	43.8	652	58.7
Out Migrate	258	25.5	201	18.1
Unknown	311	30.7	257	23.2
Total	1,012	100.0	1,110	100.0

Null Hypothesis X

There is no significant difference in adult-preparatory and adult-supplementary trainee's family's primary source of income before the trainees were age 14.

Results

The chi-square approximation (d.f. = 4) was 3.349, which indicates that there was no significant difference in family's primary source of income of adult-preparatory and adult-supplementary trainees before trainees were age 14 at .05 level. The majority of trainee's responses on family's primary source of income before trainees were age 14 was marked "Wage or Salary." The percentage distribution was 64.9 per cent for adult-preparatory and 64.8 per cent for adult-supplementary training programs.

TABLE XII

TRAINEE'S FAMILY'S PRIMARY SOURCE OF INCOME BEFORE THE
 TRAINEES WERE AGE 14 BY THE TYPE OF TRAINING PROGRAM

Source of Income	Trainees in Adult- Preparatory Training (N=1,007)		Trainees in Adult- Supplementary Training (N=1,106)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
Farming	177	17.6	206	18.6
Self- Employed	120	11.9	141	12.7
Wage or Salary	654	64.9	717	64.8
Welfare	13	1.3	10	0.9
Other	43	4.3	32	2.9
Total	1,007	100.0	1,106	99.9*

*Discrepancy due to rounding off to nearest tenth percent.

Null Hypothesis XI

There is no significant difference in reason of adult-preparatory and adult-supplementary trainees for entering programs.

Results

The chi-square approximation (d.f. = 1) was 169.9, which indicates that there was significant difference in reason of adult-preparatory and adult-supplementary trainees for entering programs at .05 level. The majority of trainee's response was enrolled in programs to

"prepare for jobs." The percentage distribution was 89.9 per cent for adult-preparatory and 66.1 per cent for adult-supplementary training programs.

TABLE XIII

TRAINEE'S REASON FOR ENTERING IN THE PROGRAMS
BY THE TYPE OF TRAINING PROGRAM

Reason for Enrolling	Trainees in Adult-Preparatory Training (N=1,103)		Trainees in Adult-Supplementary Training (N=1,092)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
To Prepare for Job	911	89.9	722	66.1
Other	102	10.1	370	33.9
Total	1,013	100.0	1,092	100.0

Null Hypothesis XII

There is no significant difference in comparative participation rate of adult-preparatory and adult-supplementary trainees at different levels of educational establishments.

Results

The chi-square approximation (d.f. = 5) was 66.3, which indicates that there was significant difference in comparative participation rates of adult-preparatory and adult-supplementary trainees at different levels of educational establishments at .05 level. The majority of

trainees was enrolled in post high school vocational-technical schools. The percentage distribution was 91.9 per cent for adult-preparatory and 96.3 per cent for adult-supplementary training programs.

TABLE XIV

COMPARATIVE PARTICIPATION RATES OF TRAINEES AT DIFFERENT
LEVELS OF EDUCATIONAL ESTABLISHMENTS BY
THE TYPE OF TRAINING PROGRAM

Levels of Educational Establishment	Trainees in Adult-Preparatory Training (N=1,022)		Trainees in Adult-Supplementary Training (N=1,127)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
Junior High School	35	3.4	8	0.7
High Schools	47	4.6	32	2.8
Area Vocational-Technical Schools	61	5.9	122	10.8
Junior Colleges	64	6.3	149	13.2
University related Technical Institutes	317	31.0	304	26.9
Private Vocational Schools	498	48.7	512	45.4
Total	1,022	99.9*	1,127	99.8*

*Discrepancy due to rounding off to nearest tenth percent.

Testing of Null Hypothesis in
Socioeconomic Background

Three factors relative to socioeconomic background were examined. These factors were occupations of heads of a household who were

engaged in full-time employment prior to entering the programs, educational attainment of adult students who are head of a household and have worked as full-time employee prior to entering the programs, and annual income of adult students who are head of a household and have worked as full-time employee prior to entering the programs. The result of these three factors is reported in this section.

Null Hypothesis XIII

There is no significant difference in socioeconomic background of adult-preparatory and adult-supplementary trainees who are heads of a household and have worked as full-time employees prior to entering in the programs.

Results

The chi-square approximation (d.f. = 2) was 23.56, which indicates that there was significant difference in socioeconomic background of adult-preparatory and adult-supplementary trainees who are heads of a household and have worked as full-time employees prior to entering in the programs at .05 level. The majority of trainee's socioeconomic background was in Class II*. The percentage distribution was 89.4 per cent for adult-preparatory and 83.7 per cent for adult preparatory and 83.7 per cent for adult-supplementary training programs.

TABLE XV

SOCIAL CLASS ASSIGNMENTS FOR 891 TRAINEES WHO ARE HEAD OF A
HOUSEHOLD AND HAVE WORKED AS FULL-TIME EMPLOYEE PRIOR TO
ENTERING THE PROGRAMS BY TYPE OF TRAINING PROGRAM

Social Class	Trainees in Adult- Preparatory Training (N = 273)		Trainees in Adult- Supplementary Training (N = 618)	
	Actual Cell Value	% of N in Variable	Actual Cell Value	% of N in Variable
Class I	10	3.7	83	13.4
Class II	244	89.4	517	83.7
Class III	19	6.9	18	2.9
Total	273	100.0	618	100.0

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Program planners for adult-preparatory and adult-supplementary training programs often have trouble establishing effective curricula because of the lack of descriptive information about trainees. Therefore, this study was concerned with providing needed information about characteristics of trainees in adult-preparatory and adult-supplementary programs. This chapter includes a summary and conclusions of the study and recommendations.

Summary and Conclusions

The purpose of this descriptive study was to identify differences and similarities in social, personal, and socioeconomic background characteristics of trainees in adult-preparatory and adult-supplementary programs at the 11 private and 24 public vocational-technical schools in Oklahoma. Adult-preparatory and adult-supplementary trainee characteristics thought to be important for educational planning were examined.

Four research questions relating to selected personal, social and socioeconomic background characteristics of trainees were considered in the study: (1) Is there a difference in the average age of trainees in adult-preparatory and adult-supplementary programs? (2) Do trainees in adult-preparatory and adult-supplementary programs have different social background characteristics? (3) Do trainees in adult-

preparatory and adult-supplementary programs come from different socioeconomic backgrounds? (4) Is there a difference in comparative participation rates of trainees at different levels of educational establishments between adult-preparatory and adult-supplementary?

Two criteria were applied for selection of trainees in programs and institutions. All trainees were over the age of 21 and were enrolled in adult-preparatory or adult-supplementary training programs in private and public vocational-technical schools for first semester of the 1968-1969 school year. Each trainee was enrolled in one of the adult-preparatory and adult-supplementary programs (Distributive Education, Office and Business Education, Technical Education, and Trade and Industrial Education) offered by 11 private and 24 public schools in Oklahoma.

Included in the study were 2149 trainees. There were 1022 adult-preparatory and 1127 adult-supplementary trainees. The list of schools in the study is given in (Appendix B) by name of school, level of educational establishments, city, county, and training areas.

OTIS Supply Form II, a questionnaire, was utilized to collect the data on characteristics of trainees.

As a result of analysis of data, it was discovered that the largest percentage of trainees was enrolled in Trade and Industrial Education Program. The percentage distribution was 62.4 per cent for adult-preparatory and 40 per cent for adult-supplementary trainees.

The largest percentage of both types of trainees were in the 21-25 age bracket. By the type of training 62.8 per cent for the adult-preparatory and 33.5 per cent for adult-supplementary trainees were in the 21-25 age bracket. The age of trainees ranged from 21 to 62 years

and the average age was 26.7 years for adult-preparatory and 30.2 years for adult-supplementary trainees.

The majority of trainees was married. The percentage distribution was 60.2 per cent for adult-preparatory and 79.8 per cent for adult-supplementary trainees.

The largest percentage of trainees had working experience in semi-skilled occupational categories. The percentage distribution was 49.8 per cent for adult-preparatory and 33.2 per cent for adult-supplementary trainees. However, more adult-supplementary trainees had experienced working in professional and semi-professional occupational categories prior to entering the program. The percentage distribution was 18.5 per cent of adult-preparatory and 44.7 per cent of adult-supplementary trainees.

The size of a community in which trainees grew up before trainees were age 14 was almost the same for both adult-preparatory and adult-supplementary trainees. The largest percentage of trainees grew up in a community with population less than 2500. The percentage distribution was 31.8 per cent for adult-preparatory and 31 per cent for adult-supplementary trainees.

The majority of trainees had attained 9th-11th grade education prior to entering the programs. The percentage distribution was 71.3 per cent for adult-preparatory and 67.7 per cent for adult-supplementary trainees. However, more adult-supplementary trainees had gone beyond the high school education. The percentage distribution was 14.4 per cent for adult-preparatory and 28.4 per cent for adult-supplementary trainees.

The majority of trainees said they did not receive information about the adult-preparatory and adult-supplementary training programs from any particular source. Their response on the questionnaire was marked "NOBODY."

The largest percentage of trainees approximate annual income was in the \$5,000-\$6,000 income bracket. Thirty and two tenths per cent of adult-preparatory and 25.1 per cent of adult-supplementary trainees fitted into this income bracket. However, more adult-supplementary trainees (86.9 per cent) were making over \$5,000-\$6,999 annual income as opposed to 34.1 per cent of adult-preparatory trainees.

The majority of the trainees' family's primary source of income before trainees were age 14 was "wage and salary." The percentage distribution was 64.9 per cent for adult-preparatory and 64.8 per cent for adult-supplementary trainees.

The majority of trainees said that the major reason for enrolling in the program was "to prepare for jobs." The percentage distribution was 89.9 per cent for adult-preparatory and 66.1 per cent for adult-supplementary trainees. However, more trainees (33.9 per cent of adult-supplementary) responded "other reasons" for enrolling in this program and the percentage was three times higher than that of adult-preparatory trainees.

The majority of trainees were receiving training at post high school vocational-technical schools. Ninety-one and nine tenths per cent of adult-preparatory and 96.3 per cent of adult-supplementary trainees were enrolled in private and public vocational-technical schools. Junior colleges and university-related technical institutes' enrollment was 37.3 per cent of adult students.

The majority of the 891 adult students who are heads of a household and have worked as full-time employees prior to entering the programs was classified in Class II. The percentage distribution was 89.4 per cent of adult-preparatory and 83.7 per cent of the adult-supplementary trainees.

Variables of statistically significant differences at .05 level between adult-preparatory and adult-supplementary trainees at 35 vocational-technical schools were the following: (1) number of student enrollment by training, (2) age distribution of trainees, (3) marital status of trainees, (4) occupational experience of trainees prior to entering the programs, (5) source of information about vocational-technical education programs, (6) educational attainment of trainees prior to entering the program, (7) annual income of trainees who are heads of a household and have worked as full-time employees prior to entering the program, (8) expected geographical mobility of trainees after the completion of programs, (9) reason for enrolling in the programs, (10) socioeconomic background of trainees who are heads of a household and have worked as full-time employees prior to entering the programs, and (11) comparative participation rates of trainees at different levels of educational establishments.

Variables of statistically non-significant difference at .05 level between adult-preparatory and adult-supplementary trainees were size of a community in which trainees grew up before the trainees were age 14 and trainee's family's primary source of income before the trainees were age 14.

Findings Related to the Research Questions

Answers to four research questions were sought in this study. An attempt was made to partially answer the questions by collecting data regarding research questions.

Research Question 1.

Is there a difference in the average age of trainees in the adult-preparatory and adult-supplementary programs? Based upon the findings of this study it was concluded that there is a difference of trainee's average age between adult-preparatory and adult-supplementary programs. The average age for adult-preparatory and adult-supplementary trainees is 26.7 and 30.2 years old respectively.

Research Question 2.

Do trainees in the adult-preparatory and adult-supplementary programs have different social background characteristics? It was concluded that trainees in adult-preparatory and adult-supplementary programs have different social background characteristics. Twelve items related to this question were examined and differences of trainee's characteristics were found in ten of twelve items.

Research Question 3.

Do trainees in the adult-preparatory and adult-supplementary programs come from different socioeconomic backgrounds? It was concluded that the trainees in adult-preparatory and adult-supplementary programs have different socioeconomic backgrounds. The chi-square test

indicates that there is a significant difference in socioeconomic background between adult-preparatory and adult-supplementary trainees.

Research Question 4.

Is there a difference in comparative participation rates of trainees at different levels of educational establishments between adult-preparatory and adult-supplementary programs? The chi-square test indicates that there is a significant difference in comparative participation rates of trainees at different levels of educational establishments between adult-supplementary and adult-preparatory programs.

Recommendations

The following recommendations were made based on this study that:

1. Educational institutions and state agencies responsible for planning and operating adult-preparatory and adult-supplementary education programs should participate in planning and establishing the formal information service in the state to encourage adults to receive a training.
2. Entrance requirements for adult-preparatory and adult-supplementary programs should be flexible enough to open up opportunities for adults who desire to receive vocational-technical training and retraining for their future occupations.
3. Employers of adult-preparatory and adult-supplementary graduates in Oklahoma should consider their recruitment practices toward this caliber of manpower including "on

campus" interviews, wider coverages with recruitment literature, salaries competitive to other state offers, "on the spot" job offers, and close communication of manpower needs with the institutions which educate trainees.

4. Follow-up studies of adult trainees are absolutely necessary to evaluate programs and cost-benefit analysis is extremely important to the study of such aspects as dropout rate, success in obtaining gainful employment, job satisfaction, determination of whether they are reducing Oklahoma's unemployment rate and poverty, geographical mobility of graduates, and whether they are making a significant contribution to the easing of skill shortages. Hopefully, economic analysis can help us to determine which programs to start, where, with whom, when there is a need to expand, and when to stop. It might tell us when the whole package or combination of its components is appropriate to meet some specific social goals.

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APPENDIX A

OTIS II QUESTIONNAIRE

OCCUPATIONAL TRAINING INFORMATION SYSTEM

1. NAME _____		2. AGE _____		3. SEX (CHECK ONE) <input type="checkbox"/> M <input type="checkbox"/> F	
LAST		FIRST		MIDDLE	
4. ARE YOU MARRIED (CHECK ONE) <input type="checkbox"/> YES <input type="checkbox"/> NO		5. SOCIAL SECURITY NUMBER (IF ANY) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>			
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? <input type="checkbox"/> YES <input type="checkbox"/> NO		8. ARE YOU PHYSICALLY HANDICAPPED? <input type="checkbox"/> YES <input type="checkbox"/> 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)		<input type="checkbox"/> FIRST YEAR <input type="checkbox"/> SECOND YEAR <input type="checkbox"/> THIRD YEAR <input type="checkbox"/> FOURTH YEAR			
15. WHO MOST INFLUENCED YOU TO ENROLL IN THIS PROGRAM? (CHECK ONE)		<input type="checkbox"/> RELATIVES <input type="checkbox"/> HIGH SCHOOL PRINCIPAL <input type="checkbox"/> HIGH SCHOOL COUNSELOR <input type="checkbox"/> FRIENDS <input type="checkbox"/> HIGH SCHOOL ACADEMIC TEACHER <input type="checkbox"/> OTHER <input type="checkbox"/> EMPLOYER <input type="checkbox"/> VOCATIONAL TEACHER <input type="checkbox"/> NOBODY			
16. WHY DID YOU ENROLL IN THIS PROGRAM? (CHECK ONE)		<input type="checkbox"/> TO PREPARE FOR A JOB <input type="checkbox"/> OTHER (SPECIFY) _____			
17. HOW MANY YEARS OF SCHOOL DID YOU COMPLETE BEFORE ENTERING THIS PROGRAM?		ELEMENTARY OR HIGH SCHOOL <input type="checkbox"/> 4 OR LESS <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 COLLEGE <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> MORE THAN 4			
18. WHAT WERE YOU DOING BEFORE YOU FIRST ENROLLED IN THIS PROGRAM? (CHECK ONE)		<input type="checkbox"/> EMPLOYED FULL TIME (EXCEPT SUMMER EMPLOYMENT) <input type="checkbox"/> GOING TO SCHOOL <input type="checkbox"/> UNEMPLOYED (LOOKING FOR WORK) <input type="checkbox"/> MILITARY <input type="checkbox"/> OTHER			
19. IF YOUR ANSWER TO QUESTION 18 WAS "EMPLOYED FULL TIME", WHAT WAS YOUR JOB CATEGORY? (CHECK ONE) (LEAVE BLANK OTHERWISE)		<input type="checkbox"/> PROFESSIONAL OR KINDRED WORKERS (INCLUDES ACCOUNTANTS, ENGINEERS, PERSONNEL WORKERS, ETC.) <input type="checkbox"/> TECHNICIANS (DRAFTSMAN, ELECTRICAL TECHNICIAN, ETC.) <input type="checkbox"/> MANAGERS, OFFICIALS, PROPRIETORS, FARM OWNERS, FARM MANAGERS <input type="checkbox"/> CLERICAL WORKERS (INCLUDES BOOKKEEPERS, CASHIERS, STOREKEEPERS, ETC.) <input type="checkbox"/> SALES WORKERS <input type="checkbox"/> CRAFTSMAN, FOREMAN, AND KINDRED WORKERS (INCLUDES CARPENTERS, ELECTRICIANS, MACHINISTS, ETC.) <input type="checkbox"/> OPERATIVES AND KINDRED WORKERS (INCLUDES APPRENTICES ASSEMBLERS, TRUCK DRIVERS, DELIVERY MEN, WELDERS, ETC.) <input type="checkbox"/> SERVICE WORKERS (INCLUDING PRIVATE HOUSEHOLD, JANITORS, GUARDS, ETC.) <input type="checkbox"/> LABORER, (INCLUDING FARM) <input type="checkbox"/> OTHER (SPECIFY) _____			
20. IF EMPLOYMENT OPPORTUNITIES ARE EQUAL, DO YOU PLAN TO WORK IN OKLAHOMA WHEN YOU FINISH THIS PROGRAM?		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> DON'T KNOW			

<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)</p> <p>(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>_____</p> <p>(NUMBER)</p>

APPENDIX B

LOCATION OF
SCHOOLS AND THE TYPES
OF TRAINING PROGRAMS OFFERED

<u>Name of Schools</u>	<u>City</u>	<u>County</u>	<u>Adult Preparatory</u>	<u>Adult Supplementary</u>
<u>Jr. Colleges</u>				
Sayre Jr. College	Sayre	Beckham		X
Cameron Jr. College	Lawton	Comanche	X	X
Northern Oklahoma Jr. College	Tonkawa	Kay	X	
Eastern Oklahoma Jr. College	Wilburton	Latimer	X	X
Northeastern Oklahoma Jr. College	Miami	Ottawa	X	X
<u>University Related Schools</u>				
Langston University	Langston	Logan	X	
Oklahoma City OSU Technical Institute	Oklahoma City	Oklahoma	X	X
Okmulgee OSU Technical School	Okmulgee	Okmulgee	X	X
Oklahoma State University Technical Institute	Stillwater	Payne	X	X

<u>Name of Schools</u>	<u>City</u>	<u>County</u>	<u>Adult Preparatory</u>	<u>Adult Supplementary</u>
<u>Jr. High School</u>				
Oklahoma City Jr. High School	Oklahoma City	Oklahoma	X	X
<u>High Schools</u>				
Chickasha High School	Chickasha	Grady		X
Ponca City High School	Ponca City	Kay	X	
Buffalos Valley High School	Buffalos Valley	Latimer		X
Miami High School	Miami	Ottawa	X	X
Central Oak High School	Oklahoma City	Oklahoma	X	X
Jenkins High School	Tulsa	Tulsa	X	X
Bartlesville College High School	Bartlesville	Washington	X	
<u>Area Vocational- Technical Schools</u>				
Fort Cobb	Fort Cobb	Caddo	X	
Ardmore	Ardmore	Carter	X	X
Enid	Enid	Garfield	X	X
Oklahoma City	Oklahoma City	Oklahoma	X	X

<u>Area Vocational- Technical Schools (Continued)</u>	<u>City</u>	<u>County</u>	<u>Adult Preparatory</u>	<u>Adult Supplementary</u>
Duncan	Duncan	Stephens	X	
Tulsa	Tulsa	Tulsa	X	X
Tri-County	Bartlesville	Washington	X	X
<u>Private Schools</u>				
American Flyers, Inc.	Ardmore	Carter	X	X
Ponca City Business College	Ponca City	Kay	X	X
Shamrock School of Aeronautics	Bethany	Oklahoma	X	X
Oklahoma School of Banking and Business	Oklahoma City	Oklahoma	X	X
Southwest Automotive School	Oklahoma City	Oklahoma	X	X
Hill's Business University	Oklahoma City	Oklahoma	X	X
Southwest Machinist School	Oklahoma City	Oklahoma	X	X
Spartan School of Flight	Tulsa	Tulsa	X	X
Tulsa's School of Aviation	Tulsa	Tulsa	X	X

<u>Private Schools (Continued)</u>	<u>City</u>	<u>County</u>	<u>Adult Preparatory</u>	<u>Adult Supplementary</u>
Oklahoma School of Business	Tulsa	Tulsa	X	X
Spartan School of Aeronautics	Tulsa	Tulsa	X	X

VITA

Yukio Yokoyama

Candidate for the Degree of
Master of Science

Thesis: AN ANALYSIS OF ADULT EDUCATION STUDENT CHARACTERISTICS IN
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