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CAREER ASPIRATIONS OF HIGH SCHOOL BOYS
WITH LIMITED ACADEMIC ABILITY

by

Charles O. Ryan

A Dissertation Submitted to the Faculty of the
COLLEGE OF EDUCATION
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1965
I hereby recommend that this dissertation prepared under my direction by Charles O. Ryan entitled THE EFFECTS OF OCCUPATIONAL INFORMATION ON THE CAREER ASPIRATIONS OF HIGH SCHOOL BOYS WITH LIMITED ACADEMIC ABILITY be accepted as fulfilling the dissertation requirement of the degree of Doctor of Education.

David Wayne Smith
Dissertation Director
June 26, 1965

After inspection of the dissertation, the following members of the Final Examination Committee concur in its approval and recommend its acceptance:

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SIGNED: Charles D. Rogers
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ABSTRACT

The study was designed to determine the effects of occupational information on the career aspirations of high school boys with limited academic ability. The population studied was drawn from two senior high schools in the State of Nevada and is heterogeneous in terms of racial and ethnic groups.

Identification of the 134 high school boys was based on the school records of achievement, teacher recommendations, and measured intelligence.

The literature established that a number of factors were suspected of having an influence on the realism of occupational aspirations of young adults. Consequently, data was accumulated on age and socio-economic background. These factors were considered as variables as well as the intelligence quotients in the statistical analysis.

Because of the character of the data, the analysis of covariance and the Table of F were selected for testing the hypotheses.

The sample selected for the study consisted of approximately equal numbers of students from the two high schools, Wooster in Northwestern Nevada and Western in Southern Nevada. The groups selected for comparative purposes from each of the two senior high schools
were: (1) the mentally retarded (MR) group, (2) group (A-B) of the slow-learner students, (3) group (A) of the slow-learner students, (4) group (B) of the slow-learner students, and (5) the control (C) group. The total number of students involved was 134.

Each member of the groups was pre-tested with the Occupational Aspiration Scale (OAS) and the Wechsler Adult Intelligence Scale (WAIS). The socio-economic level of each student was determined by aligning paternal and/or maternal occupational status with the various categories of Jeffs' Socio-Economic Scale. All tests and classifications were administered and determined by the project psychometrist.

Occupational information was offered to each of the experimental groups twice a week for 15 weeks. All lessons were offered by a special instructor at each school with the regular classroom teacher in attendance.

On-the-job training was provided for 46 per cent of the mentally retarded group.

The classroom teachers of group (A) slow-learners were counseled in an attempt to promote complete support for the program. The classroom teachers of group (B) slow-learners did not receive counseling and were somewhat ambivalent toward the program.

OAS was administered to all subjects immediately following the 15 week period, wherein, occupational information had been offered to the experimental group.

The suppositions of the study were so designed as to fit the
construct of the null hypotheses. It was assumed that there would be no real difference between the mean scores of the groups involved. The hypotheses ensued: A significant difference (.01 level) in total occupational aspiration between the mentally retarded (MR) and control (C) groups was discovered. A significant difference (.01 level) was also discovered to exist in total occupational aspiration between the combined slow-learner (A-B) and control (C) groups; the slow-learner (A teacher supported) and (C) groups; and the slow-learner (B teacher non-supported) and (C) groups.

No significant differences were found to exist between the (MR) and the slow-learner groups.

The results of the study disclosed that the experimental groups reduced their expression level (realistic and idealistic) and time-dimension (long- and short-range) occupational aspirations after receiving occupational information. The reverse was true of the control groups in every instance which may have been an indication that they were impractical and unrealistic about their occupational aspirations.
CHAPTER I

INTRODUCTION

Introduction to the Problem

In recent years, increasing impetus has been directed toward the education of children with limited academic ability. According to the literature, secondary schools, in efforts to deal with this problem, have met with little success (NEA Journal, March, 1964, p. 90). Statistics on high school drop-outs have indicated that high schools are not offering programs with sufficient interest to hold many of the students in school. The program offering for high school boys was reported as having less holding power than the one for girls (Office of Education, 1964).

Many boys with limited academic ability, who do graduate from high school, are not realistic about their occupational goals. Recognition of the lack of realism of the occupational goals of this segment of the high school population as a basic problem in their preparation for the world of work, has emphasized the need for a more realistic curriculum (Office of Education, 1964).

Concern for an improved understanding of the problems involved in the preparation of high school boys with limited academic ability indicated the need for an investigation into the typical curriculum being offered the high school population. This study raised the question
as to the effects a course in occupational information would have on the career aspirations of high school boys with limited academic abilities.

Studies have been conducted with other segments of the school population relating to the realism of occupational aspirations as well as the effects a course in occupational information had on their realism, but the literature did not indicate any studies of this type directly related to the academically limited.

The purpose of this research, then, was to test an extension of the above idea with high school boys with limited academic ability.

The Problem

The problem of selecting occupational goals that are consistent with aptitudes and abilities has long been a concern to educators. Hoppock (1957) has indicated that choice of occupational goals which are within the capacity of the student has been a strong force in promoting positive mental health. All too frequently students harbor occupational aims not in accord with their potential. Allen (1941) fostered the belief that vocational guidance is especially needed for the lower mentality group. Seidman (1953) further challenged the school by indicating that work experience should be an integral part of the high school curriculum and counseling program. A number of researchers have supported the belief that many times adolescent youth aspire to occupational positions that give evidence of their youthful idealism and lack of realism (Bradley, 1943; Caplan, Ruble, and Segel, 1963; Dorcus and Dunlap, 1940; Erdman, 1957; Fleege and Malone, 1946; Knapp, 1953; Moore, 1948; Allen, 1941; Myers, 1947; Norris, Zeran, and Hatch, 1960; Perrone, 1964).
Lockwood summarized research in this area when he stated:

During the past two decades, researchers and writers in the area of guidance almost unanimously have deplored the lack of realism and the maldistribution of the vocational choices, preferences, and interests of high school youth. These same researchers have often recommended that school systems set up organized programs of vocational choices. Results of these studies with high school students have shown: (1) that, though wiser vocational choices are frequently made at higher grade levels, pupils generally are aiming 'too high' in their choices; (2) that chances for social and economic advancement are determining job choices of future men and women with little thought being given to individual fitness, in terms of ability, for vocations selected; (3) that pupils of high mental ability sometimes select vocations offering limited opportunities, and pupils of low mental ability sometimes select occupations for which they are not intellectually fitted; (4) that vocational choices tend to fall in the upper and middle categories of the occupational scale—those with most prestige, highest salaries, require most education; and (5) that lower occupational levels simply do not attract boys and girls in a society with our traditions of self-advancement. It seems fair to generalize that many of the youth studies have been unrealistic in their approaches to their vocational preferences. (Lockwood, 1958, p. 98)

Career patterns may be influenced by a number of factors such as level of mentality, parental socio-economic level, age, sex, and opportunities to which the student has been exposed. Experimentation involving these variables was the basis of this investigation.

Importance of the Problem

Approximately 60 per cent of the high school graduates do not go on to college (Office of Education, 1963) and about 15 per cent of the students enrolled are considered to be academically limited (Gallagher, 1959). The Office of Education (1964) reported that of the latter group a substantial number became school drop-outs. Others finished high school
without an adequate preparation for an occupation or they did not have a realistic concept of the type of occupations into which they were capable of entering. This study was made in an effort to provide a modest contribution to the data that must be acquired in order to achieve a better understanding of these problems and to suggest possible modifications in the curriculum design which would afford a better educational program for the academically limited high school boy.

Although considerable research has been conducted in the area of occupational information as it relates to career aspirations, it has been selective, concentrated primarily on the average or above-average student, and focusing relatively little attention on possible concomitants, such as limited academic ability, which require careful appraisal. Also, very few studies have been concerned with the less able students of the institutions, the majority of researchers having limited their studies to the more academically competent children found in the public schools.

This study was undertaken in an attempt to produce realism in occupational goal selection by mentally retarded and slow-learning senior high school boys. The major objective of the project was centered around promoting vocational habilitation of boys with limited academic ability.

**Hypotheses**

The suppositions of this study were so designed as to fit the construct of the null hypothesis. It was assumed that there was no real difference between the mean scores of the groups involved. The hypotheses were:

1. There will be no significant differences in the occupational
aspirations or realism of occupational goals between the mentally retarded and control groups as a result of offering on-the-job training and occupational information to the former.

2. There will be no significant differences in the occupational aspirations or realism of occupational goals between the combined slow-learner (A-B) and control groups as a result of offering occupational information to the former.

3. There will be no significant differences in the occupational aspirations or realism of occupational goals between the slow-learner (A) and control groups as a result of offering occupational information to the former with induced support by the classroom teacher.

4. There will be no significant differences in the occupational aspirations or realism of occupational goals between the slow-learner (B) and control groups as a result of offering occupational information to the former without the induced endorsement of the classroom teacher.

5. There will be no significant differences in the occupational aspirations or realism of occupational goals between the mentally retarded and combined slow-learner (A-B) groups as a result of offering on-the-job training and occupational information to the former and occupational information only to the latter.

6. There will be no significant differences in the occupational aspirations or realism of occupational goals between the mentally retarded and slow-learner (A) groups as a result of offering on-the-job training and occupational information to the former and occupational information only, but with induced support by the classroom teacher, to the latter.
7. There will be no significant differences in the occupational aspirations or realism of occupations goals between the mentally retarded and slow-learner (B) groups as a result of offering on-the-job training and occupational information to the former and occupational information only without the induced endorsement of the classroom teacher to the latter.

8. There will be no significant differences in the occupational aspirations or realism of occupational goals between slow-learner group A and slow-learner group B as a result of offering both groups occupational information but with teacher support for offering occupational information for slow-learner group A only.

Selection Criteria

The group chosen for the study was selected from the Washoe and Clark County School Districts. The Washoe County School District lies in Northwestern Nevada and enrolls somewhat over 25,000 students and Clark County School District which lies in Southern Nevada has a student population in excess of 55,000 students.

The boys used in the study were selected from each school district, Wooster High School in the Washoe County School District and Western High School in the Clark County School District. The principal city in Washoe County is Reno and in Clark County the principal city is Las Vegas. The two cities are similar in cultural environment and socio-economic conditions, thus providing a favorable research climate. These cities possess both urban and rural environments that run the gamut of American social class levels. The communities involved offer a limited number of wealthy families, a large number of professional persons, and many clerical,
skilled, semi-skilled, and unskilled workers.

The two schools selected were chosen because the students appeared to be more socio-economically alike than any other combination of high schools in the State. A study of high schools in the State revealed Wooster to be comparable in population to Western, about 2,000 students, as well as having a student body which appeared to be closely related socially and economically.

Limitations of the Study

This study has several limitations. As indicated by the title it was confined to high school males with restricted academic ability. The group represented also was limited to two senior high schools, Wooster High School, Washoe County School District in Northwestern Nevada, and Western High School, Clark County School District in Southern Nevada. The N in the study was 134.

Definition of Terms Used

Educable Mentally Retarded

...a 'term used to refer to mentally retarded persons who are capable to some degree of achievement in traditional academic subjects such as reading and arithmetic. Also used to refer to those mentally retarded children who may be expected to maintain themselves independently in the community as adults, or to the group of mentally retarded obtaining IQ scores between 50 and 70, 75 or 80 (Dubin, 1961, p. 8).'

The full scale intelligence quotient in the study was 51 to 127 with a mean of 84 which was derived from the administration of the Wechsler Adult Intelligence Scale.
Slow-learners

"Slow-learner" as employed in the investigation related to those students assigned to track three (lowest level track) of a three-track educational grouping system. The modified track system used by the two senior high schools involved in this study assigned students to a track on the basis of three criteria: (1) teacher recommendation, (2) intellectual level, and (3) past academic performance. Generally these students were academically retarded by at least one year.

The IQ range for the combined slow-learner (A-B) group of the study was 75 to 123 with a mean of 96. The IQ range for the slow-learner (A) group was 75 to 123 with a mean of 95. The IQ range for the slow-learner (B) group was 77 to 107 with a mean of 97. The control (C) group was also a slow-learner group. The IQ range for the control group was 51 to 127 with a mean of 96.

Expression levels

Operational definitions designed to estimate the points which bound the range of a person's level of aspiration at any one time. Estimates of the lower and upper boundaries will be called the realistic and idealistic expression levels, respectively (Haller and Miller, 1961, p.8).

Realism as employed in the study was represented by the individual score or sum of scores related to questions 1, 3, 5, and 7 of the Occupational Aspiration Scale (OAS). Idealism as employed in the study was represented by the individual score or sum of scores related to questions 2, 4, 6, and 8 of the OAS.
Time-dimension periods

Estimates for future times that are near or distant will be called short-range and long-range time-dimension periods, respectively (Haller and Miller, 1961, p. 8).

Regarding the LOA (level of occupational aspiration) of youth, these terms refer to points in their work-careers, short-range indicating estimates for the time at which they first take a serious job and long-range indicating estimates for a time after they have become established in their occupations (Haller and Miller, 1961, p. 20).

Short-range as employed in the study was represented by the individual score or sum of scores related to questions 1, 2, 3 and 4 of the OAS. Long-range as employed in the study was represented by the individual score or sum of scores related to questions 5, 6, 7, and 8 of the OAS.

Occupational aspiration

We define LOA as the area (a point or limited range of points) of the occupational prestige hierarchy which an individual views as a goal. The range of an individual's LOA is bounded in two general ways: (1) by what he views as realistically probably versus idealistically desirable for him, and (2) by the goals which he has for near versus the distant future. A subject cannot adequately respond to an LOA measurement unless both the realistic or idealistic and the time boundaries are explicitly specified. (Miller and Haller, 1964, p. 448).

Occupational aspiration as employed in this study indicates those occupational goals (realistic, idealistic, short-range, and long-range) represented by the individual score or sum of sub-test scores of the OAS.

Procedures

The subjects included in the study received the Occupational Aspiration Scale (OAS) the last week of January, 1965, and again during the last week of May, 1965.
All subjects used in the study were given an individual IQ test, the Wechsler Adult Intelligence Scale (WAIS), during the period of the study, February 1, 1965 to May 28, 1965.

The Socio-Economic Scale adapted from Hollingshead (1949), Centers (1949), and Warner and Abegglen (1955) by Jeffs (1962) was used to evaluate the students' socio-economic position. The socio-economic level of each subject involved in the study was established by comparing biographic information provided by the school districts with Jeffs' Socio-Economic Scale (Jeffs, 1962).

The experimental group received occupational information two periods per week for a total of 15 weeks. The occupational information was organized and presented by two competent instructors. The lessons presented were based on the Syllabus of Occupational Information for Mentally Retarded Senior High School Boys (Barnum, 1964).

Within the experimental group some students received on-the-job training as well as occupational information. Those provided work experiences were exposed to a variety of work situations ranging from a few hours a week up to the equivalent of half-time employment.

Analysis of the Data

Analysis of covariance was employed to test the significance of the differences between the experimental and control groups as concerned with the effects of occupational information on the career aspirations of the subjects included in the study. The groups were matched as closely as possible on the basis of intelligence quotients (WAIS scores), achievement level, and socio-economic status. Analysis
of covariance was employed because it compensated for the initial differences in variables (Borg, 1963).

Summary

Although the literature revealed an increasing amount of research on the problem of career aspirations as it related to realism in a more normal population, this research was concerned primarily with these variables in a group of the academically limited.

High schools selected for carrying out the research had administrations amenable to accepting the research proposal. The hypothesis was: There will be no significant differences in the occupational aspiration or realism of occupational goals between the academically limited experimental and control groups as a result of offering occupational information and on-the-job training to the former.

The two high schools used in the study have been interested in providing an improved curriculum for the less able students and had mentally limited populations large enough to provide the needed experimental and control groups. A total of 134 academically limited high school boys were identified for use in the research. Information was developed and/or tests administered to substantiate age, socio-economic family status, achievement level, IQ level, and level of occupational aspiration.

Verification procedures were established with regard to levels of intelligence.
CHAPTER II

REVIEW OF LITERATURE

Introduction

This chapter presents the results of the review of the literature. A considerable amount of research has been undertaken in areas related to career aspirations. An attempt was made to organize the review into subtopics to include: theory of occupational choice; methods for establishing realism of vocational choice; vocational choice of students with limited intellectual ability; vocational placement of students with limited intellectual ability; vocational choice and occupational information; intelligence and vocational choice (positive and negative); intelligence and realism of vocational choice; intelligence and occupational hierarchy; socio-economic status and vocational choice (positive and negative); socio-economic status and realism of vocational choice; age and vocational choice (positive and negative); and sex and occupational choice. The review of the literature was confined to those studies which seemed to be most appropriate to the investigation.

Theory of Occupational Choice

Super (1953) indicated that vocational choice results from parental socio-economic status, the student's intellectual level, and his own interpretations of the world of work. One group of researchers (Ginsberg,
Ginsburg, Axelrad, and Herma, 1951) formulated a theory of occupational choice which proposed that such a choice is developed over a period of 10 or more years, that it is related to experience, is basically irreversible, and to some degree a compromise. This period extends essentially from latency (between six to eleven) to the time when the individual enters upon his first regular job, and is centered in the adolescent developmental period. Forer (1953) explained occupational choice largely in terms of the personality and the emotional needs of the individual. Forer has indicated that these needs are sometimes unconscious. Miller and Form (1951) expressed the belief that individuals discover their occupational goals through a compounding of work experience, observation, and expectation. Hoppock (1957) has offered a rather extensive theory of vocational choice, two points of which are particularly pertinent to this study:

1. Information about ourselves affects occupational choice by helping us to anticipate whether or not we will be successful in collecting what the contemplated occupation offers us.

2. Information about occupations affects occupational choice by helping us to discover the occupations that may meet our needs, and by helping us to anticipate how well satisfied we may hope to be in one occupation as compared to another (Hoppock, 1957, p. 74).

Hoppock has thus suggested the valid choices of occupations may evolve from adequate self-appraisal and knowledge of the requirements of jobs.

Hollingshead (1949) reported that the pattern of vocational choice corresponds roughly with the job patterns associated with each class in the adult world, i.e., the adolescents' ideas of desirable jobs are a reflection of their experiences in the social class and family culture complexes.
Despite the apparent differences, most of the theories of occupational choice that have been advanced to date have had much more in common than in contrast. Norris, Zeran, and Hatch (1960) prepared a list of "common denominators" which they found to reoccur in counselees during counseling. The occupational choice themes were:

1. Occupational choices are the direct result of counselee needs.

2. The counselee's needs parallel the developmental process of the individual.

3. Needs may be or may not be expressed or recognized by the counselee.

4. Choice is a process which extends over a period of years from elementary school to young adulthood.

5. Decisions, although tentative, are related to prior experiences. Such decisions have an impact on the future to the extent that many become irreversible.

6. The career pattern is influenced by many factors such as: parental socio-economic level, mental ability, personality characteristics, and the opportunities to which the individual is exposed.

7. The development of a realistic self-concept in relationship to occupational opportunity is imperative to realistic choice.

8. The process is a series of compromises between goals and opportunities.

9. Occupational choice is subject to change as the recognized needs of the opportunities undergo significant changes.

10. The process is continuous and affected by many planned as well as incidental experiences. (Norris, Zeran, and Hatch, 1960, p. 488)

This list would seem to substantiate needs, goals, and opportunities as dominant factors in job choice.

Methods for Establishing Realism of Vocational Choice

Indices of realism of vocational choice have often been used by counselors in judging students' need for guidance (Super, 1961). The realism of vocational choices of normal children have been evaluated several ways. One group method for establishing vocational realism is the percentage method of comparing occupational choice to census data in
an attempt to determine whether or not the choice is realistic in terms of the percentage of persons employed in the various occupational groups. Another method frequently used to determine the realism of vocational choice is that of comparing the level of choice to the intelligence of the chooser.

The method used for establishing vocational realism for this study was that of comparing obtained results with established norms from the Occupational Aspiration Scale (Haller, 1961).

Vocational Choice of Students with Limited Intellectual Ability

Erdman (1957) conducted a study to determine the vocational preferences of adolescent mentally retarded boys. The 106 white, mentally retarded boys, ages 16 to 18, involved in Erdman's investigation participated in interviews to determine their vocational choices and to determine some of the variables influencing such selections. Erdman offered the following conclusions.

1. The majority (52 per cent) of the adolescent mentally retarded boys chose jobs at the unskilled or semi-skilled level. Of the others, 34 per cent chose skilled jobs, 14 per cent could not make a choice, and only one per cent chose jobs at the semi-professional level.

2. There is evidence to indicate that many of the mentally retarded boys have achieved the objective of self-realization. An analysis of other choices, such as prior choices or most liked choices indicated that the mentally retarded were relatively realistic. Although some would have preferred high level jobs, they recognized their lack of academic ability for such jobs.

3. The retarded boys making first vocational choices at the unskilled and semi-skilled levels tended to be realistic. Most of the 36 retarded boys making first vocational choices at the skilled level tended to be unrealistic. A significant difference was observed between the number of subjects expecting to work at these levels and the estimated number of retarded employed there.

4. The vocational experiences associated with the home and community appear to exert stronger influences on the formulation and crystallization of the vocational choice of the retarded boys than the experiences in school.
a. Eighty per cent of the boys reported that they had discussed their vocational choice with someone at home as compared to only 33 per cent who reported they had discussed their choice with someone at school.

b. In most cases the subjects reported no marked conflict between the expectation of their parents for them and their own first vocational choice.

c. The first vocational choices of the mentally-retarded boys tended to be at the same level as the occupations of the fathers as reported by the boys.

d. An interest in jobs for the boys occurred most often as a result of actual experience on a job and secondly by having someone tell them about a job. These experiences were more frequently associated with the community and home than with the school.

5. The levels of vocational choices of the boys appear to be influenced to a relatively small degree by certain factors in the school program. An analysis of the percentage of time spent teaching vocational information, the number of vocational services, or the existence of an organized course of study appears to have a minimum of influence on the levels of choice.

6. The evidence gathered suggests that there are at least three major areas to be considered in the development of vocational curricula for the adolescent mentally retarded. These are the creating of opportunities for the development of vocational concepts of self, the identification and analysis of the forces influencing the vocational attitudes of the boys, and the planning of a program whereby the retarded become aware of the structure and characteristics of the labor force in their community as it applied to them. (Erdman, 1957, pp. 130-131)

This study was limited to a white population. No evidence was found in the literature to either substantiate or to suggest differences between white and other national origin groups. Educable mental retardation was not defined in terms of IQ range.

Magary (1960) completed an investigation designed to analyze the vocational interests of educable mentally-retarded adolescent boys from three occupational classes. The 90 boys involved in this study ranged in
chronological age between 12-0 years and 20-10 years with a mean of 15-11 years. The range and mean in intellectual level was 50 to 70 and 67.6 respectively. All subjects were enrolled in a special education or vocational program. Two aspects of this Author's research appeared pertinent to the study:

1. The stated vocational preferences of the retarded group generally showed a consistent trend toward interest in semi-skilled and unskilled work.

2. The vocational preferences expressed by the retarded boys used in the study indicated that there may be a positive relationship to the occupational class of their fathers. The boys whose fathers were employed at unskilled or semi-skilled work were generally more realistic in stating vocational preferences than were boys from high socio-economic levels.

Witty and Lehman (1931) found that dull intermediate-grade boys expressed somewhat immature vocational attitudes as compared to bright boys in the same grade. The dull boys selected occupations indiscriminately while the bright boys proved more selective. Davis, Hagan, and Strouf (1962) asked 116 children, age 12, to write paragraphs telling what they would like to be when they grew up and why they made such selections. The results of this investigation revealed that the children with a measured intelligence of less than 90 used more fantasy in making tentative choices of occupations. Forty-one were found to have marked reading deficiencies and made occupational choices which the authors termed immature. The authors inferred that these reading deficiencies may have had an effect on the level of occupational choice in these subjects.
Vocational Placement of Students with Limited Intellectual Ability

Voelker (1955) surveyed 302 former pupils from the Detroit public school special education program in order to determine how many were working and the level at which they were employed. Voelker discovered that 64 per cent were doing unskilled work, 35 per cent semi-skilled, and one per cent were in what might be called skilled labor. Bobroff (1956) also conducted an investigation in the Detroit public schools in which he studied a group of 121 mentally retarded persons previously enrolled in special classes. The results of this study indicated that 27 per cent of the persons were employed at the unskilled level, four per cent were working in service occupations, six per cent were engaged in clerical occupations, one per cent in agriculture, one per cent managerial, three per cent in military service, and eight per cent were unemployed.

Clark and Gist (1938), in an earlier study, carved out a follow-up survey of a group of youths who had been originally evaluated in 1926. They found a positive relationship between intelligence levels and the types of jobs in which the subjects were engaged.

It is pertinent to note that students with measured IQ's below 75 were most frequently found to be employed in unskilled or semi-skilled jobs.

A number of studies supported the conclusion that most of the students who show intellectual deficiency are employed on jobs at the unskilled or semi-skilled level (Baller, 1936; Coakley, 1954; McIntosh, 1949; Keys and Nathan, 1932; DiMichael, 1956; Byrns, 1939; Super, 1962).

Vocational Choice and Occupational Information

An effort was undertaken to determine if the offering of
occupational information to persons of limited ability would enhance the realism of their occupational objectives. Several investigations concerning this issue have been reported.

Lurie, Goldfien, and Baxt (1960) investigated the influence of occupational information upon the personal growth and occupational realism of high school students of about age 15-1/2 years with a median IQ of approximately 80 and similar home backgrounds. All students were considered to be slow-learners. Three of the six groups involved received both group and individual assistance including occupational counseling. These three groups were called the experimental groups. Three other groups (control groups) received no counseling services. The results of this study indicated that those students of the experimental groups who received vocational counseling showed a considerable increase in maturity and realism in their replies to the final questionnaire. These researchers concluded that offering vocational counseling may lead to greater realism and maturity in vocational planning. Also, the counseling services appeared to have had the desirable effect of increasing the proportion of boys and girls who engaged in part-time work after school.

The way occupational information influenced occupational goal selection was studied by Speer and Jasker (1949). The results of this study indicated that the most suitable vocational choices were made by the 107 adult males used in the study when an exploratory work experience was combined with occupational information. The authors found that for the group as a whole those persons who lacked adequate occupational information and also had little knowledge of their own abilities were more likely to select unsuitable occupational goals. The authors also stated that those
who were in direct contact with occupations made more appropriate vocational plans. Generally, the individuals who selected professional and semi-professional occupations arrived at their decisions primarily through reading.

In a study of 1,000 students of the Hawthorne Junior High School in San Antonio, Texas (Allen, 1941) 1/4 possessed measured IQ's below 80. The lowest IQ group was asked to state their choice of occupation. None selected an unskilled job, and only 1/4 or 33 per cent, selected a semi-skilled position. The students with IQ's ranging from 90 to 100 appeared somewhat more realistic in their vocational choices. Sixteen per cent of the latter group selected unskilled jobs and 31 per cent chose semi-skilled occupations. These students were then offered a course in occupational information and asked to restate their job choices. In a comparison of the two sets of choices, before and after completion of the occupation course, it was found that 48 out of the 150 had lowered their choice of occupation to a level more in line with their capacity.

Recktenwald (1946) designed a study involving twelfth-grade boys in a single high school. This investigation was undertaken to discover if the systematic study of information about selected occupations listed in the Cleeton Vocational Interest Inventory influenced responses to certain items. The results clearly showed that greater realism resulted when students had been given occupational information.

Handley (1949) offered terminal vocational counseling by the non-directive technique to all seniors in two high schools. The pupils were given full information regarding their own test scores and the labor market. The students involved in this study were from diverse socio-economic
groups. The author stated that the lower occupational objectives of the minority group (not identified by race) may have been the result of the influence by the vocational information offered during the counseling period. The non-minority group, on the other hand, was more realistic in their selection of occupational objectives.

Several studies (Bateman and Remmers, 1939; Nick, 1942) have shown that offering occupational information increases the liking for lower level occupations.

A similar study was conducted by Gonyea (1962) in which he attempted to determine appropriateness-of-vocational-choice one year after the termination of counseling. The results of this investigation showed that nearly half the sample of 227 clients changed their vocational plans between pre- to post-counseling, and about 60 per cent of the changes were in the direction of greater appropriateness.

Erdman (1957), working with mentally retarded adolescent boys, felt that teaching vocational information had little effect on the subjects' level of vocational choice. The IQ range was not identified in Erdman's study.

**Intelligence and Vocational Choice**

A number of investigations have revealed positive and significant relationships between intelligence and vocational choice and intelligence and realism of vocational preference. Some research findings, however, indicated that these variables are not always positively and significantly related, but may be negative or fail to reach a significant degree of relationship. Some research has focused on the realism of vocational
goal selection. Other research has centered about the hierarch of
occupational choice and intelligence.

Some of the research evidence which has indicated that there may
be a positive relationship between intelligence and job choice has been
assessed followed by a review of studies which failed to substantiate the
existence of a relationship between intelligence and occupational choice.

**Intelligence and Vocational Choice, (positive)**

Haller and Miller (1961), studied a group of high school boys and
found a positive correlation of .45 between IQ and occupational aspiration.
A. B. Wilson (1959) pointed to the influence of intelligence in setting
found intelligence and occupational aspiration among high school boys to
be highly related. This general relationship between intelligence and
level of aspiration also holds at the college level (Gilinsky, 1949).
Bradley (1943) inferred from his study of high school and college students
that the higher the intellectual capacity, the greater is the likelihood
that the student will choose a professional career. Chown (1959) found
intelligence to have a limiting effect on occupational choice. The most
intelligent in the group studies by Chown made a free choice, but those
of low intelligence tended to choose office work. Holden (1961) indicated
that intelligence is related to occupational selection and that students
at the lower range of the IQ continuum may be less positive about choice.
Stubbins (1950) professed that one of the best indicators of aspiration
is intelligence. An earlier study by this same investigator (Stubbins,
1948) suggested that intelligence is a strong influence in the deter-
mination of inappropriateness of a vocational choice. Super (1957)
advocated that intelligence may have a direct and positive relationship to occupational aspiration, and stated that:

Intelligence is related to the occupational level aspired to: that is, the brighter the individual, the more likely he is to aspire to higher level occupations, and the duller he is, the more likely he is to be interested in a lower level occupation (Super, 1957, p. 203).

Other research that seemed to have suggested the possibility that intelligence may be positively related to the selection of occupational goals imbodied studies by Barnett, Handelsman, Stewart, and Super, 1952; Caplan, Ruble and Segel, 1963; Haggerty and Nash, 1924; Lockwood, 1958; Milliken, 1962; Myers, 1947; Rauner, 1962; Roberts, 1947; Speer and Jasker, 1949; Super, 1947; Super and Crites, 1962; Moser, 1949.

**Intelligence and Vocational Choice, (negative)**

Dubin (1961) carried out a study involving retarded boys and girls which, among other things, attempted to discover what factors were related to work interests. The chronological age of the subjects ranged from 12 years and no months to 15 years and 10 months with an average chronological age of 13 years and 10 months. The Mankin Interest Finder was employed by this researcher to establish work interests. The results of this investigation revealed that little relationship existed between intelligence and the work interest areas expressed by the retarded subjects involved. Auten (1951) explored the vocational choices of high school seniors and demonstrated that these students did not, in general, tend to select vocations related to assumed abilities. Goldstein (1959) reviewed several studies and concluded that factors other than intelligence are extremely important in occupational placement. Just what the other
factors are is still a matter of conjecture, according to Goldstein. Moore (1943) reported that only a loose relationship appeared to exist between intelligence and the level of vocational choice.

**Intelligence and Realism of Vocational Choice**

Several research workers have attempted to relate intelligence and realism of vocational choice. Gorelick (1962) conducted a pilot study involving educable mentally retarded adolescents in which she attempted to assess the realism of their occupational goals. This study indicated that the great majority of educable mentally retarded subjects did not possess realistic post school vocational plans. The results suggested the need for a larger study into the problem of vocational realism and the type of guidance and vocational training programs which should be provided for the educable mentally retarded adolescents.

Lockwood (1958) sampled the graduating seniors of the Baltimore, Maryland academic high schools in an attempt to establish realism of vocational preference. From the results of this sampling Lockwood deduced that:

In factors of intelligence (IQ) seems directly related to the level of a student's realism of vocational preference. On the average, the higher the student's IQ level, the higher is his realism index, and the lower the IQ level, the lower the realism score appears to be (Lockwood, 1958, p. 104).

In evaluating the vocational choice and realism of the level of aspiration of high school senior boys, Moore (1948) discovered a less positive relationship between intelligence and realism of vocational choice. Moore felt, however, that realism of immediate goal-setting behavior seemed unrelated to intelligence. Ryan (1953) investigated
factors affecting realistic and unrealistic choice of an occupation among young adults. This study revealed that intelligence quotients were statistically and significantly higher for the realistic group of subjects.

Milliken (1962) studied the realism of occupational appraisal by high school seniors.

He found tentative acceptance of his hypothesis that students generally were more realistic in their stated interest when it is related to their tested abilities. Milliken found that the students with the higher academic aptitude test scores generally stated an interest in professional and college-bound activities, whereas, the less able students usually listed occupations which did not require strong academic potential.

Stubbins (1943) investigated the realism of vocational choice of veterans. He found that the results of intelligence and special aptitude tests and an examination of educational background appeared to be strong factors in the determination of inappropriate vocational choices.

Fleege and Malone (1946), from the result of a research project, reported that a large number of adolescents chose occupations beyond their mental capacities and that intelligence was an important factor in self-concept among elementary school children of low, average, and high intelligence. This study disclosed the fact that mentally retarded children more generally overestimate success and possess less realistic self-concepts than do those students with average or high intelligence. Other reports lend support to the belief that intelligence is related to the realism of occupational choice (Myers, 1947; Small, 1953).

Intelligence and Occupational Hierarchy

Rusalem and Cohen (1964), realizing the dearth of data concerning
the influence of mental retardation upon occupational prestige rankings, conducted a study involving 276 mentally retarded students living in an institution, 92 mentally retarded students attending special classes, and 99 non-retarded students attending regular classes maintained for all students. All subjects were of secondary school level. The occupational prestige rankings offered by both the male and female subgroups disclosed that the community school normals and the community school retardates did not differ significantly from each other in their ratings on an adaptation of the Narth-Hall Occupational Prestige Rating Scale. The males agreed upon the five highest prestige occupations; medical doctor, dentist, airline pilot, owner of a factory, and teacher. This group of males also agreed upon the six lowest prestige occupations; shoe shiner, garbage collector, janitor, taxi driver, farm worker, and truck driver.

Two conclusions were offered by these researchers:

1. The occupational prestige rankings of mentally retarded students residing in the community do not differ significantly from those of non-retarded students in the same community, suggesting that retardation, per se, is not the crucial factor in assigning occupational prestige rankings.

2. The occupational prestige rankings of retardates living in the community differ significantly from those of retardates living in an institution, suggesting that differential institutional and community experiences play a crucial role in determining a retarded student's evaluation of the prestige level of an occupation (Rusalem and Cohen, 1964, p. 986).

Other studies have indicated that an occupational hierarchy may exist insofar as intelligence is concerned. Stewart (1947) and Harrell and Harrell (1945) employed the Army General Classification Test to measure intelligence. They found an occupational hierarchy related to A.G.C.T. scores. An investigation by Lorge and Blau (1942) prompted
these researchers to conclude that a positive relationship existed between the major occupational groups and the estimated intelligence which is required for each. Simon and Levitt (1950) and Moser (1949) have constructed tables which show actual and desired occupations respectively and intellectual levels required to succeed in such occupations.

**Socio-Economic Status and Vocational Choice**

The influence of socio-economic status upon the occupational aspirations of youth has been investigated. The results of such investigations have generally been positive; however, some research has shown this relationship to be neutral or even negative.

A number of research efforts have been directed at determining the relationship between socio-economic status and vocational choice. Research has also been conducted which has disputed the relationship between socio-economic status and vocational choice.

**Socio-Economic Status and Vocational Choice (positive)**

Magary (1960) stated that Hollingshead indicated the influence of class structure on youths' vocational choice when the latter concluded that the pattern of vocational choices corresponds roughly with the job patterns associated with each class in adult work. It was this author's belief that the adolescents' ideas of desirable jobs were reflected in their socio-economic backgrounds. The conclusion drawn by Magary was that youngsters in the lower class structure usually adjust their job desires to what they hope to achieve, which placed them in the same class structure as their parents.
Warren (1955) has presented some of the problems with which the counselor of the mentally retarded is confronted as related to the retardate's family:

1. Many parents of mentally retarded children have unsound attitudes about their children.
2. Parents underestimate, overestimate, or overindulge their children when they cannot accept them as they are. These parents are often beset by false fears or spurious optimism and can project their own shortcomings and aspirations in the direction of the afflicted.
3. Parents often direct their children's activities and destinies to the extent that they block the very assistance they are seeking for their children.

Coleman (1953) worked with the parents of retarded children and pointed out that these parents admitted that they possessed high hopes for their children and found it difficult to face reality by accepting their children's limitations, especially without rejecting the children.

Jordan and deCharms (1959) offered the following statement which tends to support the theory that mental retardates are uniquely influenced by the home environment:

The theoretical findings suggest that mentally retarded children are exposed to typical child-rearing practices, at least as far as later achievement motivation is concerned. This gives some credence to the observation that parents of mentally retarded children have a different set of expectations which they proffer to their children (Jordan and deCharms, 1959, p. 466).

Galler (1951) discovered that lower class boys were occupationall motivated by extrinsic reasons rather than altruistic or intrinsic reasons to a greater extent than were upper middle class boys. Galler indicated that the data gathered lends support to the belief that social class influenced children's choice of occupation and the reasons for such choices. Berdie (1943) investigated the backgrounds of 106 pre-college high school boys and discovered that a close relationship existed between the occupations
of the fathers and the interests of the sons. Beeson and Tope (1938) found
that younger boys (grade nine) were more likely to select the occupations
of their fathers than older boys (grades eleven and twelve). Kroger and
Louttit (1935) found few high school boys who desired to follow their
fathers' occupations.

Beilin (1952) analyzed the factors affecting occupational choice
among lower socio-economic groups. The subjects involved in this study
were seniors about to graduate from high school. Beilin discovered that
a number of persons in the lower socio-economic groups selected occupations
which did not involve many obstacles because they were conscious of the
difficulties of climbing the vocational ladder. Dole (1961) studied the
occupational and educational choices of students from grades six, nine and
twelve as well as college students and disclosed that the occupational
objectives of the younger students reflected the socio-economic forces
of their environment. Haller and Miller (1961) employed the Occupational
Aspiration Scale in a study of 17-year-old boys and found a correlation of
.37 between the socio-economic status of the respondent's family and
occupational aspiration. One thorough investigation (Seidman, 1953)
reported a significant relationship between adolescents' occupational
aspiration and expectations and their socio-economic backgrounds. Another
study (Sewell, Haller, and Straus, 1957) involving a large sample of high
school seniors from the entire state of Wisconsin tended to show that
values specific to different social status positions are influential in
the establishment of educational and occupational aspirations. Measured
intelligence and sex were controlled in the Wisconsin study so that they
did not affect vocational choice. The test results lend support to the
sociological claim that the values of the different status positions have the greatest influences on the levels of education and occupational aspirations.

Roberts (1947) investigated the effects of socio-economic status on the level of aspiration of 40 junior high school boys. He discovered that children from favored socio-economic home environments tended to be more realistic in their goal-setting than were children from less favored homes. Ryden (1951) found that well over 80 per cent of the high school students in his study thought of their parents as their chief vocational counselor. Strivers (1959) reported significant socio-economic influences on level of aspiration among high school girls. Gould (1941) found that level of aspiration average discrepancy scores among college males tended to be higher in subjects with an inferior socio-economic background than in those with a better background. Urell (1960) discovered that adolescents residing in different socio-economic settings have significantly different occupational aspirations. This same result was found by Stubbins (1950) while studying male adults. Bradley (1943), using high school and college students as subjects, generally confirmed the findings offered by Urell and Stubbins and added that students frequently chose a vocation somewhat higher in the socio-economic scale than that occupied by the parent.

Super (1953) proposed that an individual's parental socio-economic level is one influencing factor on the design of career patterns. One researcher (Frank, 1941) felt that the level of aspiration cannot be fully understood without consideration of the influence of the social and cultural background. After reviewing a number of studies, Erdman (1957) concluded that the home represents the major source of vocational counseling
for youths. Other investigations generally supported the conclusions herein cited concerning the positive relationship between level of aspiration and socio-economic status (Peters, 1941; Singer and Steffre, 1954; Youmans, 1956; Reissman, 1953; Hill and Hole, 1958; Carp, 1949; Speer and Jasker, 1949; Handley, 1949; Empe, 1956).

**Socio-Economic Status and Vocational Choice (negative)**

Dubin (1961) investigated the work interests of retarded children. This researcher disclosed that work interest areas, as expressed by retarded girls and boys on the Mankin Interest Finder, had no relationship to the social class levels of their families. Stephenson's (1955) investigation of the occupational aspirations and plans of these students did not reflect the occupational position of the father. Another investigation (David, Hagan, and Strouf, 1962) showed the occupational choice maturity of junior and senior high school age students has little or no relation to socio-economic level. Nelson (1939) indicated that the home is not much of an influence on occupational choice unless the father is in the professions of doctor, teacher, or journalist. Ryan (1953) in summarizing previous research concluded that family influence is not a particularly important factor in establishing occupational goals. Anderson (1932) also discounted the influence of social forces in determining the choice of a life work. Auten's (1951) study on how students select vocations showed that the home influence is probably not a greater determiner of occupational goal selection.

**Socio-Economic Status and Realism of Vocational Choice**

Erdman (1957) investigated the vocational choices of slightly
over 100 white mentally retarded adolescent boys who were enrolled in special classes located in six of the major labor market areas of Wisconsin. Erdman developed evidence to suggest that the types of experiences students have in the home and school are important in promoting realistic vocational selections. Ryan (1953) determined that girls from families with high incomes proved more realistic in occupational choice than did girls from lower income families. A 1946 study by Korner disclosed that parents or other members of a student's family frequently foster unrealistic vocational goals in the child.

Moore (1948) did conduct a study designed to examine the relationship between realism of vocational choice and realism of the level of aspiration of high school senior boys. Age, sex, race, grade, national origin, and the amount of vocational guidance received, were held constant, insofar as was possible, in the selection of the 95 subjects involved in the study. Realism of vocational choice in this study was rated on a six-point scale, of the discrepancy between vocational goal and ability as evidenced by aptitude test scores, achievement test scores, and scholastic record. The results of this study revealed that the realism of immediate goal-setting behaviour is unrelated to external home environment. The study also showed that there appears to be no generality of realism between discrete long-range and immediate goal-setting behavior. The author of this study concluded that living in a favored home seemed to have little influence on the realism of occupational goals. An investigation of the realism of vocational preference of a stratified random sample of 508 high school graduates in Maryland (Lockwood, 1958)
revealed that realism of vocational preference is uninfluenced by and unrelated to the socio-economic-cultural-prestige factors represented by residential district, race, sex, school attended, parental occupational level, and the number of children in the family. Realism, as defined in the Lockwood research, involved the degree of personal fitness of an individual high school graduate for his vocational preference in terms of the demands of the vocational choice. This researcher concluded that realism of vocational preference is an individual rather than a group phenomenon.

**Age and Vocational Choice**

Research results related to chronological age and vocational choice have been somewhat inconclusive in that such results have at times been conflicting.

**Age and Vocational Choice (positive)**

Roeber and Garfield (1943), using high school students as subjects, indicated that evidence exists to the effect that vocational choices become slightly more realistic from lower secondary-school grades to upper secondary-school grades. Ryan (1953) investigated the factors affecting realistic and unrealistic choice of an occupation and found that the average age of the realistic male of his study was 22.4 years and the average age of the unrealistic male was 20.5 years indicating that there might be an age factor related to realism of vocational preference. Galler (1951) pointed to the influence of age upon the selection of an occupation. Dole (1961) studying intermediate grade, junior high school, and senior high school children, found that the younger subjects of his
study were less realistic as concerns occupational objectives than were the older subjects. A review of the literature by Bradley (1943) disclosed that individuals' vocational choices may change with age. A similar review by Lockwood (1958) indicated that wiser vocational decisions are frequently made by students at higher grade levels.

**Age and Vocational Choice (negative)**

Stubbins (1948) conducted a study to establish some correlates of unrealism in vocational choice among 224 veterans. The results of this investigation refute some observations that older people tend to be more realistic in their occupational selections because of their practical work experience. Age, in this instance, was disclosed to be no determinant of realism of occupational preference. Canning, Taylor, and Carter (1941) found that vocational interests of older men, and high school groups may not be due to age. Klugman (1948) indicated that performance on an aspiration board appeared not to be influenced by age. One investigator (Carp, 1949) examined the realism of high school boys' occupational choices and concluded that little relationship existed between the level of their desired or expected occupations and chronological age. Schmidt and Rothney (1944) investigated the variability of vocational selections of high school students and reported convincing evidence on the instability of expressed vocational preferences from one year of high school to the next.

**Sex and Occupational Choice**

A review of the literature disclosed the fact that relatively
few investigations involving sex and occupational choice have been reported.

Sex and Occupational Choice (positive)

Davis, Hagan, and Strouf (1962) investigated parts of Ginsberg's theory of occupational choice. These investigators, employing 12-year-old students, found that more mature occupational choices seemed to correlate with the feminine sex. Bradley (1943) indicated that Endicott, studying the factors involved in influencing students in their choice of vocation, discovered that boys are more influenced by successful persons actually engaged in a particular type of work and that boys do more reading along vocational lines than do girls. This same researcher (Bradley, 1943) felt that sex differences in vocational attitudes may be a result of differences in certain aspects of physical growth. Bradley (1943) also reported that Boynton discovered a somewhat mild relationship between sex and vocational preference. Lehman and Witty (1936) studied the vocational attitude of school children ages 8-1/2 to 18-1/2 years and discovered that the vocational attitudes of boys appear to change more frequently than do those of girls.

Summary

In general, the research on career aspirations has been concentrated on the interests of the more academically able students. Considerable literature was found that dealt with occupational information, but studies related specifically to the academically limited are few in number and limited in scope. Very little information was found concerning listings, job specifications, or other data which was
grouped or indexed to represent occupations considered acceptable for the academically limited.

The review of the literature, suggested that there were marked variations in the data reported from numerous studies undertaken on intelligence and vocational choice, socio-economic status and vocational choice, and age and vocational choice. It was suggested that such divergent conclusions may have been reached because of different sampling techniques or the use of varying criteria in the statistical analysis.

In conclusion, it would seem that:

1. There is some disagreement as to whether there is a definite relationship between career aspirations and socio-economic level.

2. There is widespread disagreement on whether or not intelligence is a determinant in vocational choice.

3. There appears to be a strong tendency for the student to whom occupational information has been provided to be more realistic in the selection of occupational goals.

4. There is general agreement that exploratory work experience has a predominate influence on the realism of vocational choice but the evidence is not conclusive.
CHAPTER III

METHODS AND PROCEDURES

Introduction

The purpose of this Chapter is to present the methodology and organization of the study. The two senior high schools, Western and Wooster, from which the population samples used in the study were taken, are here described. Sources and nature of the data obtained are presented and followed by a verification of the data. The remainder of the Chapter is devoted to a description of the statistical procedures used in the study along with a justification for their selection.

Sample Selection

Population

Two school districts were chosen for this study, Washoe County in Northwestern Nevada with an enrollment in excess of 25,000 students and Clark County in Southern Nevada with an enrollment of approximately 55,000 youngsters. The major city in Washoe County is Reno and in Clark County, Las Vegas. These cities possess both urban and rural environments that cover a broad range of Western American social class levels. The communities involved have a limited number of wealthy families, a considerable number of professional persons, and a large number of clerical, skilled, semi-skilled, and unskilled workers.
Sample

The sample selected for the study consisted of approximately equal numbers of students from the two county school districts used in the study. Although each district has three senior high schools in the metropolitan area, this research was carried out in but two schools, Wooster and Western. These schools were chosen because their student bodies appeared to be more alike socially and economically. The Wooster and Western High Schools also compared favorably population-wise having enrollments in excess of 2,000. The groups selected for use in the research from each of the two senior high schools included: (1) a mentally retarded group, (2) a group (A-B) of the slow-learner students, (3) a group (A) of the slow-learner students, (4) a group (B) of the slow-learner students, and (5) a control group. The total number of students involved in the investigation was 134.

Method of Presenting Information

Occupational information was disseminated to all students in the experimental group by the same instructor at each high school. The instructor at Wooster High School prepared the lessons and supervised the instructor at Western High School. The lessons on occupational information were designed to enrich the social studies curriculum for all the experimental groups.

Mental retardates. Students labeled as mentally retarded were assigned to special education classes. The 15 mentally retarded students included in the study were enrolled in a supervised program provided by the school for a total of six hours per day. For three hours (one-half
the students were enrolled in a self-contained class under the
direction of a special education teacher. The remaining half-day
assignment consisted of heterogeneous classes, e.g., physical education,
shop, arts and crafts or selected work-training programs.

Where students were found to be eligible for vocational re-
habilitation services, on-the-job training programs were developed by
their vocational rehabilitation counselors. The seven students assigned
to on-the-job training continued to receive instruction from their
special education teachers, but the work-training programs were offered
in lieu of all or part of their heterogeneous classes.

Occupational information was presented to the mental retardates
during the period that they were assigned to the special education
class. The information was presented by the instructors employed for
the study.

The criteria for the selection of the mentally retarded pupils
for both schools were as follows:

In general, all educable mentally handicapped special
education students between 16 and 19 years of age,
residing in the geographic area served by the Wooster
High School, are eligible for program participation.
Specifically, each student must first be certified for
and be accepted by the Division of Vocational Rehabili-
tation (DVR) as a client. Transfer students will be
accepted, but must be certified by DVR as soon as possible
in order to continue. The standards imposed by DVR are
realistic and there would be little or no purpose for the
school to continue a student that did not meet them.

Certification Criteria

It is assumed that pupils will meet the following
criteria, but all students must meet at least two:

(1) An Intelligence Quotient (IQ) measuring
between 55-80 on an individual standard-
ized test.
(2) A Social Maturity Quotient (IQ) measuring between 60-80.
(3) A minimum of three years of academic retardation indicated by a nationally standardized achievement test. (Brooks, 1963, p. 2)

The total number of mental retardates that completed participation in the study was 15. This number included eight from Western and seven from Wooster.

**Slow-learners.** Under the provisions of the modified track system employed by the Senior High Schools included in this study, students other than those in special education were assigned to various tracks on the basis of three criteria: (1) teacher recommendation, (2) intellectual level, and (3) past academic performance. Slow-learners were typically assigned to Track Three.

As part of the track system, two social studies classes were provided for slow-learners. Occupational information was disseminated to the slow-learners during their social studies classes. The information was presented by the same instructors who taught occupational information to the mentally retarded boys. These classes were arranged in such a way as to be conducive for fulfilling the purposes of the research. The slow-learners were further designated as group (A-B), group (A), and group (B). Group (A-B) was composed of the total number of students in group (A) and group (B). The classroom teachers assigned to Group (A) were selected because of a particular enthusiasm and interest in the research project. The group (B) teachers were persons
who demonstrated limited interest in the experiment.

Table 1 is a summary of the number of slow-learner students from Western and Wooster Senior High Schools assigned to group (A) and group (B). The total N for these groups was 39. This number (39) then represents group (A-B).

Table 1. Number of Slow-Learner Students Assigned to Groups A-B, A and B at Western and Wooster Senior High Schools.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western High School</td>
<td>19</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Wooster High School</td>
<td>20</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Totals</td>
<td>20</td>
<td>19</td>
<td>39</td>
</tr>
</tbody>
</table>

Control group. The control group (C) was selected randomly from a list of "low-intellectual and low-achievement level" Track Three boys prepared by the participating high schools. Randomness was accomplished by dividing the number of boys (305) appearing on the list by the number (100) desired for the control group. The quotient approached the number four. A lesser number three was then selected and every third name on the list was chosen to serve as a member of the control group. Enrollment changes reduced the number in the control group to 80. Forty-two boys represented the control group from Western Senior High School while thirty-eight boys represented the control group from Wooster Senior High School.

Treatment of the Groups

Both the mentally retarded and the slow-learner groups (A) and
(B) were provided occupational information twice a week for 15 weeks. An analysis of the occupational information has been included under procedures in this chapter beginning on page 52.

A portion of the mentally retarded group (seven students) received an additional treatment in the form of on-the-job training. These seven boys were given work assignments in the community under the guidance of vocational rehabilitation counselors. These assignments varied from one-half hour per day to as much as eight hours and the days they worked per week ranged from three to seven. A more complete explanation of these work assignments has been included in the section under procedures of this chapter, page 52.

The control group (C) did not receive the lessons on occupational information nor did they receive on-the-job training. The curriculum for this group was the same as that provided for all Track Three students not included in groups (A) and (B).

Instruments

Three measurement instruments were employed in the study: (1) the Occupational Aspiration Scale (OAS), (2) the Socio-Economic Scale, and (3) the Wechsler Adult Intelligence Scale (WAIS).

The reasons for selecting these instruments, a description of each, and the particular use of the instruments in this study are described in this section.

Occupational Aspiration Scale

The instrument used in this investigation as an analysis of occupational aspiration was the Occupational Aspiration Scale (OAS),
The OAS is an instrument consisting of eight multiple-choice items. It permits responses at both the realistic and idealistic levels of occupational aspiration. Time-dimension periods of occupational aspiration are also measured by this instrument. The two time-dimension responses are those of short-range (end of schooling) and long-range (at age 30). Each of these components is assessed twice resulting in eight questions. Each question offers 10 alternative answers from which one should be selected. The 10 alternatives are occupational titles drawn from among the 90 occupations ranked for prestige of occupation by the National Opinion Research Center (1947). Table 2 is offered by Miller and Haller (1964, p. 449) to help the reader understand the composition of the OAS. The numbers enclosed in parenthesis allude to the question-numbers in which each item-wording is used and the combination of levels and goal-ranges for each question. A duplicate of the OAS has been included as Appendix A.

Scoring is accomplished by assigning an occupational prestige weight to the alternative selected by the subject. Such weights were obtained from a scoring key offered by the author of the OAS. The order of the response to each question was randomized to reduce the possibility of spurious intercorrelation due to "response sets." This randomization also reduced the chances that the examinee would perceive the hierarchical ordering of the response alternative. The alternatives for each question were scored within the range of zero to nine. The total score is the summation of the scores received on each of the eight questions. Total scores may conceivably range from zero to 72. Sub-test scores may also
be obtained in the areas of short-term realism, long-term realism, short-term idealism, long-term idealism, total realism, and total idealism.

Table 2. OAS Format: Combination of Levels and Goal-Ranges for Each of the Four Question-Wordings

<table>
<thead>
<tr>
<th>Level</th>
<th>Short-range (S)</th>
<th>Long-range (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealistic (I)</td>
<td>Of the jobs listed in this question, which ONE would you choose if you were FREE to CHOOSE ANY of them you wished when your SCHOOLING IS OVER? (2 and 4)</td>
<td>Of the jobs listed in this question, which ONE would you choose to have when you are 30 YEARS OLD, if you were FREE TO HAVE ANY of them you wished? (6 and 8)</td>
</tr>
<tr>
<td>Realistic (R)</td>
<td>Of the jobs listed in this question, which is the BEST ONE you are REALLY SURE YOU CAN GET WHEN your SCHOOLING IS OVER? (1 and 3)</td>
<td>Of the jobs listed in this question, which is the BEST ONE you are REALLY SURE YOU CAN HAVE by the time you are 30 YEARS OLD? (5 and 7)</td>
</tr>
</tbody>
</table>

The following information as an analysis of responses to the OAS has been presented by Haller and Miller (1961):

1. The rate of non-responses and unusable responses is less one percent.
2. The mean score is approximately 37 points.
3. The standard deviation of the scores is approximately 11.5-13.0 points.
4. The shape of the distribution of raw scores is approximately normal.
5. The split-half reliability is about $r = .80$, when corrected for attenuation.
6. The test-retest reliability coefficient, measured on equivalent forms administered 10 weeks apart, is $r = .77$.
7. The concurrent validity coefficient, measured against perhaps the best previous LOA instrument, is $r = +.62$. (Haller and Miller, 1961, p. 134)

Socio-Economic Scale

The Socio Economic Scale used in the study was adapted from
Hollingshead (1949), Centers (1949), and Warner and Abegglen (1955). This scale was constructed in 1961 as part of a study of ability grouping by Jeffs (1962). The Scale was pre-tested at Logan Junior High School, Logan, Utah. The answer sheets for 21 of the 100 seventh grade Logan Junior High School boys who were given the Socio-Economic Scale as part of a pilot study were randomly selected to serve as a basis for establishing relationships between raters. The same number of answer sheets (21) was randomly selected from among 148 ninth grade subjects who completed the Socio-Economic Scale. Three raters from the staff of the Logan Junior High School rated each of the selected Socio-Economic Scale answer sheets independently. The raters were counselors at Logan Junior High School and were reported to be acquainted with the socio-economic conditions of the community. Table 3 shows the relationships obtained between raters. The correlation coefficients offered are intended to show that the raters evaluated each student's socio-economic position at approximately the same level.

The socio-economic level of each subject involved in this study was established by comparing biographical data provided by the Washoe and Clark County School Districts (Reno and Las Vegas area) with the Socio-Economic Scale categories. The A, B, C, D, and E categories were assigned corresponding weights of 5, 4, 3, 2, and 1 respectively. Thus, the family socio-economic status generally matching the socio-economic description of category D was given a weight of 2. Should the biographical information on family background correspond to that of category B, a socio-economic weight of 4 was assigned. The range of socio-economic weights is from 5 to 1. Most socio-economic classifications
for the study hovered around a weight of 2. A duplicate of the Socio-
Economic Scale, together with the ratings of the subjects, has been
included as Appendix B.

Table 3. Correlation Coefficients Obtained Between Raters of Socio-
Economic Status for Grades 7 and 9, Logan Junior High School

<table>
<thead>
<tr>
<th>Rater</th>
<th>r grade 7</th>
<th>r grade 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects vs 3 raters</td>
<td>.47</td>
<td>.94</td>
</tr>
<tr>
<td>Subjects vs author</td>
<td>.55</td>
<td>.85</td>
</tr>
<tr>
<td>3 raters vs author</td>
<td>.95</td>
<td>.70</td>
</tr>
<tr>
<td>Author vs composite of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>raters</td>
<td>.74</td>
<td>.95</td>
</tr>
</tbody>
</table>

a. Randomly selected Logan Junior High School males, N=21 for each grade
b. One male and two female counselors
c. George A. Jeffs
d. Three raters plus the subjects

Wechsler Adult Intelligence Scale

The intelligence quotient for each subject used in the study was
determined from the results of the Wechsler Adult Intelligence Scale (WAIS).
The WAIS is a standardized individual test, 1955 revision, of intellec-
tual functioning, the Fourth Mental Measurements Year Book, (Buros, 1953).
The individual test scores for each subject have been listed in Appendix C.
Syllabus of Occupational Information for Mentally Retarded High School Boys

A syllabus was prepared by Barnum (1964) to be used as a guide for the presentation of occupational information to mentally retarded high school boys. This syllabus was designed as an aid to the student in adjusting his vocational goals to a level commensurate with his abilities.

The syllabus was originally prepared as an enrichment resource available to teachers in special education. It was prepared to present an over-all picture of employment acceptable to mentally retarded high school boys, and stresses ways in which the student may be assisted to become aware of himself as an individual who soon will seek employment.

Lessons have been designed to serve as guides to the teachers' efforts in presenting occupational information considered to be within the scope of boys with limited academic ability.

The selection of occupations included in the syllabus were based on a perusal of occupational information received from the Nevada State Department of Education, the Employment Security Department, Vocational Rehabilitation, and private industry in the State of Nevada. The initial listing of occupations was secured from the Dictionary of Occupational Titles, U. S. Government Printing Office, Vol. 2, 1949. Only those jobs in which a person with an IQ of 85 or less could perform creditably were included.

Lessons were prepared on the occupations selected as feasible for boys to perform with limited academic ability. These lessons were presented to special education classes in two high schools as a pilot study during the school year 1963-64. The lessons which appeared to be understood by the boys with limited academic ability were compiled as a
syllabus for this study.

A summary of the content of Lesson Number VI, Freight, Part 2, Truck Driving, on occupational information is presented below as an illustration of the materials used (Barnum, 1964):

I. Objective
   A. To study the various kinds of truck driving.

II. Methods and Procedures
   A. Outline of lesson
      1. Display pictures of trucks to include heavy, light, and delivery trucks.
      2. Trace truck routes on the blackboard for cross-country, short hauls, and local delivery.
      3. Outline on the blackboard the truck driving skills needed for heavy, light, and delivery driving.
         a. Include training procedures for truck driving and jobs in related fields, e.g., warehouseman, dockman, maintenance.
   B. Fact Sheet
      1. Outlook and trend
      2. Age and health requirements
      3. Earnings
      4. Requirements
         a. Education
         b. Licenses
      5. Benefits and working conditions

III. Summary

   Included under this heading were teacher expectations of
students, value to students, and suggested follow-up by students.

IV. Vocabulary

Terms common to the occupation were presented in this section, e.g. transportation.

V. Aids

Classroom aids recommended for this lesson were blackboard and posters.

A sample lesson from this publication has been included as Appendix D.

Staff

The writer was assisted in this experiment by the addition of five persons to the school staffs on a part-time basis, a psychometrist, two instructors, and two vocational rehabilitation counselors. In addition, to these five persons, several employers cooperated by providing on-the-job training for seven boys.

A part-time instructor (teacher) was employed to disseminate occupational information to the experimental group in each of the schools. These instructors were chosen on the basis of their knowledge and experience in teaching students with limited academic ability. The instructor at Wooster High School was given the added responsibility of preparing the lesson plans and coordinating their dissemination with the instructor at Western High School. A sample lesson plan has been included in Appendix D.

The Nevada Division of Vocational Rehabilitation in cooperation with the local school districts has been directing a program aimed at the habilitation of mentally retarded high school students. Under this joint arrangement vocational rehabilitation counselors have been assigned to develop on-the-job training (OJT) programs for mental retardates in the
community providing them counseling relative to job work opportunities commensurate with their abilities. During this project, two of these special counselors had the added responsibility of following the progress of the students used in the study after job placement, and of providing counseling when necessary. OJT programs were changed periodically to acquaint the student with a variety of work experience as an aid to vocational adjustment. For example, it was necessary to adjust some OJT assignments after only a brief period of work. This followed the inference that the client was not likely to succeed at his work assignment.

The counselor kept the teachers informed of the students' progress in the OJT programs. The counselor also evaluated the students on the job performance in order to determine their chances for success as full-time employees. When deficiencies were found that would appear to hinder the student's success as a regular employee, these deficiencies were documented and brought to the attention of the teacher. Where it was determined that the teacher could treat the deficiency in the classroom setting, such an effort was made. The rehabilitation counselor coordinated the total educational program of his client and attempted to fill the gaps in the training program through counseling and/or during staffings of the case with the other professional personnel.

Psychometrist

A professional psychometrist was employed to examine all subjects included in the study. This was deemed necessary in order to provide consistency in psychological measurement. The psychometrist had utilized the Occupational Aspiration Scale in two previous studies and
had developed the Socio-Economic Scale employed in this study. He had had considerable experience in the administration and interpretation of the Wechsler Adult Intelligence Scale on both the high school and college levels.

The psychometrist was given the responsibility for administering the Occupational Aspiration Scale to all subjects in the two high schools, both pre-test and post-test. He collected the data and rated all subjects on the Socio-Economic Scale. Where the Wechsler Adult Intelligence Scale had not been administered to the subjects within a one-year period prior to February 1, 1965, a new administration of this test was carried out.

Employers

Employers in the local community were contacted by the vocational rehabilitation counselors to enlist their support in the habilitation of the mentally retarded students (clients).

An effort was made to acquaint the employer with the purpose of the OJT program. The counselors were instructed to give employers an honest appraisal of the clients to be assigned. The counselors stressed the importance of work experiences for people with limited academic ability while they were still enrolled in school. Employers were generally receptive to serving as an adjunct to the school when it was pointed out that such a procedure may bridge the gap between school and job.

The counselors explained that this program was being conducted in an effort to reduce the number of school drop-outs and to decrease the rising number of people receiving welfare.
Verification of the Data

Statistical Analysis

Analysis of covariance was selected as the investigating process to compensate for initial differences in the groups. The design of the study permitted compensation for any initial differences in intellectual level, socio-economic status, age, and pre-test occupational aspirations. Borg (1963) has supported the use of the analysis of covariance technique by suggesting that:

Many Master's theses are started after the children to be studied have already been assigned to a classroom, and school authorities are generally unwilling to rearrange classes in order to accommodate the research worker. It is not possible under these circumstances for the pupils in these classes to be assigned randomly to the different experimental conditions. This limitation rules out analysis of variance. In this case, initial differences between the groups are likely to occur, and these initial differences will, of course, have an effect on the final measurement of the dependent variable. Covariance analysis permits the experimenter to adjust the mean scores obtained on the final measure to compensate for differences between groups that have been discovered in the initial testing (Borg, 1963, p. 144).

Procedures Used in the Study

Specific procedures were utilized in gathering the data used in this study. A brief description follows of the independent variables and pre-test procedures used, together with a discussion of on-the-job training activities and methods used in disseminating occupational information. A description of what teacher support for the program entailed and a delineation of post-test procedures has also been included.
Independent Variables

An account of the groups involved in the study—mentally retarded (MR), slow-learner (A-B), slow-learner (A), slow-learner (B), and control (C) has been given previously. The independent variables applied to the first of these groups, the (MR) group, were on-the-job training and occupational information. The second of these groups, slow-learner (A-B), was a combination of slow-learner group A and slow-learner group (B). The independent variables applied to the third of these groups, slow-learner (A), were occupational information and the enthusiastic endorsement of the classroom teacher for offering occupational information. The independent variables applied to the fourth of these groups, slow-learner (B), were occupational information with the absence of enthusiastic support by the classroom teacher for offering occupational information. The control group (C) received neither on-the-job training nor occupational information.

Pre-Tests

Occupational Aspiration Scale (OAS). An initial administration of the OAS was conducted the first week of February, 1965. In order to insure satisfactory testing conditions the groups were limited to 15 students each. The psychometrist read the various questions of the OAS, and was particularly careful to assure that the mentally retarded students, many of whom were non-readers, understood what was to be done.

The investigator offered limited verbal descriptions of most of the job choices listed on the OAS. Further information was given about jobs listed when such information was sought by a student. The latter
gesture may have served to elicit more "honest" responses. Ignorance of occupational titles has drawn comment from Miller and Haller (1964):

Ignorance of the meaning of occupational titles may restrict one's true LOA (Level of Occupational Aspirations). In the real world a person must choose among the alternatives he knows. If a certain youth's knowledge is restricted to the low prestige occupations, he would truly be forced to choose among these. Thus ignorance limits aspiration. When the meanings of occupational titles are not explained to the student, his responses to the OAS properly record the limitations on his aspirations which are due to his lack of knowledge (Miller and Haller, 1964, p. 450).

Wechsler Adult Intelligence Scale (WAIS). Individual Wechsler's were administered to each student used in the study. The project psychometrist gave all tests beginning in early February, 1965 and extending through May, 1965. There were no particular problems encountered in this testing.

Socio-Economic Scale. The socio-economic level of each student was determined by aligning paternal and/or maternal occupational status with the five categories of the Socio-Economic Scale. The categories were defined in accordance with the income of the family, education, housing, automobiles, and social activities. The five categories are summarized below:

A. A family that earned more money than it could spend; belonged to exclusive clubs; lived in large houses with servants; college meant little to them; and they drove large cars.

B. A family that had professional jobs; usually went to college and graduated; were active in organizations; usually owned large houses; and frequently owned two cars.
C. A family that worked for wages or salaries or may have owned small businesses or farms; usually spent all the money earned; sometimes went to college; and usually drove a relatively new car.

D. A family that didn't have much money and worked hard; usually didn't go to college; generally rented small houses; and often drove cars more than four or five years old.

E. A family in which the father's job didn't pay much and he frequently changed jobs; in which the family often drove a car eight or more years old or had trouble paying for a newer one.

All socio-economic classifications were determined by the project psychometrist.

On-The-Job Training.

Forty-six per cent (seven) of the mentally retarded group received on-the-job training. The remaining 54 per cent (eight) were not placed because the vocational rehabilitation counselors failed to receive parental permission for on-the-job training. Parental permission was a requirement of the school districts in order to free themselves of any liability of the students when off the school grounds. The vocational rehabilitation counselors reported that those mentally retarded students who received on-the-job training held such positions as newspaper boy, baker's helper, yardworker, cafeteria worker, floorsweeper, teacher's assistant, helper in a nursery department of a hardware store, helper in a potato chip processing plant, bag boy in a grocery store, porter in an auto body shop, body and fender apprentice, concessionaire in a baseball park, library assistant, clothing size and price marker,
cashier in a thrift shop, and courtesy clerk in a food store. A student may have held one or more of the jobs listed. The length of time per day during which the mental retardate was engaged in on-the-job training ranged from one-half to eight hours. Also, these jobs did not demand that the student be on-the-job every day. Some students worked as little as three days a week while others worked as many as seven days a week.

The vocational rehabilitation counselors evaluated each mentally retarded student's potential for employment, sought jobs in the community, worked with prospective employers, placed students on jobs, and with the employers made evaluations of job performance. The counselors offered a general rating of work satisfaction for each mentally retarded student employed. Of the seven mental retardates employed, two received a job performance rating of good, three received a job performance rating of fair, and two received a job performance rating of poor. The results of this analysis may have been influenced by the fact that not all mental retardates received on-the-job training.

Occupational Information

Occupational information was offered to each of the experimental groups (MR, A and B) for a period of approximately 45 minutes twice a week for 15 weeks. Occupational information instruction began on February 1, 1965 and terminated on May 28, 1965. All lessons were prepared by a special education instructor employed by the writer to assist in the study. The teacher presented the lessons on occupational information Monday and Wednesday of each week at Wooster High School, with the regular teacher in attendance. A second special education instructor
presented the same lessons on occupational information, with periodic supervision by the instructor at Wooster, Tuesday and Thursday of each week at Western High School with the regular teacher in attendance. All lessons were taken from the *Syllabus of Occupational Information for Mentally Retarded Senior High School Boys* (Barnum, 1961). Pre-arrangements were made for classroom aids, i.e., films, film projectors, charts, pictures, posters, etc. An outline made prior to classtime and listing the most important points of the lesson was written on the blackboard to serve as a guide for both students and instructor. Detailed information for the lesson was secured from the fact sheet developed by Barnum (1964).

**Teacher Support**

Conferences were held periodically with the occupation instructors and the classroom teachers of group A (slow-learners) in an attempt to promote complete support for the program. This consultation consisted of discussion and evaluation of previous and projected lectures as well as an effort to pass along constructive criticism of future lesson plans. An integral part of the consultations was the effort to elicit classroom teacher interpretation of student reactions to occupational information being offered and to involve the classroom teacher in the design of future occupational information lectures. The classroom teachers of group B (slow-learners), however, were not involved in the consultations. The latter classroom teachers appeared somewhat ambivalent to the program.

**Summary**

Two senior high schools were selected as study sites for investigation of the effects of occupational information on the career
aspirations of high school boys with limited academic ability. Available high school records were screened for data on boys selected for the study. Biographical information and the achievement and intellectual level were gathered from cumulative school records maintained on each child.

The Occupational Aspiration Scale was administered to all subjects during the first week of February, 1965 and again during the last week of May, 1965. Socio-economic status was determined after an assessment of biographical data as rated by Jeffs' Socio-Economic Scale. Intelligence quotients were obtained from WAIS scores on tests administered during the period between February 1, 1965 and May 28, 1965.

Variables in the study included: (1) intelligence, (2) socio-economic status, (3) age, and (4) pre- and post-test occupational aspirations means. A null hypothesis was proposed in each case when a variable was compared with career aspiration.

The Analysis of covariance was utilized in order to deal with the variables in the statistical design.
CHAPTER IV

RESULTS

Introduction

Analysis of covariance, the statistical analysis employed for this study, permitted the comparison of various post-test scores while holding constant the influence of pre-test differences between groups. Pre-test differences between groups occurred in intelligence, socio-economic status, age, and occupational aspirations. The findings of the research are reported in the following section of this paper. Each hypothesis has been restated and the findings related to each hypothesis has been presented. The results have been reported as differences ($F$ and adjusted $F$) between post-test scores.

Mentally Retarded Group and Control Group Comparisons

The first hypothesis stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between the mentally retarded and control groups as a result of offering on-the-job training and occupational information to the former. The reader is referred to Table 4 for a numerical overview of the findings related to this hypothesis. Significant differences (adjusted $F$) in occupational aspirations were found between the mentally retarded (MR) and control (C) groups in all but two areas, short- and long-range realistic level. The latter, however, approached significance. Significant differences at the one per cent level of confidence were found
Table 4. A Comparison of Intelligence, Socio-Economic Status, Age, Pre- and Post-Test Occupational Aspiration Means, Significance of Difference (F) Between Means, and Final Adjusted Significance of Difference (Adjusted F) Between the Mentally Retarded and Control Groups

<table>
<thead>
<tr>
<th></th>
<th>Mentally Retarded</th>
<th>Control</th>
<th>Difference (F)</th>
<th>Difference Between Two Groups (Adjusted F)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>IQ</td>
<td>SE (Months)</td>
<td>Pre</td>
</tr>
<tr>
<td>Short-Range</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-Range</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference (F)</td>
<td>81.401</td>
<td>1.443</td>
<td>4.853*</td>
<td>.103</td>
</tr>
<tr>
<td>Difference Between Two Groups (Adjusted F)</td>
<td>2.064</td>
<td>3.597</td>
<td>4.759*</td>
<td>4.294*</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Aspiration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Idealistic</td>
<td>32.344</td>
<td>36.938</td>
<td>13.500</td>
<td>14.625</td>
</tr>
<tr>
<td>Difference (F)</td>
<td>.066</td>
<td>22.983*</td>
<td>.432</td>
<td>11.001**</td>
</tr>
<tr>
<td>Difference Between Two Groups (Adjusted F)</td>
<td>12.333**</td>
<td>4.452*</td>
<td>10.769**</td>
<td></td>
</tr>
</tbody>
</table>

**.01 per cent level of confidence
*.05 per cent level of confidence
concerning total occupational aspiration and total idealistic level while significant differences at the five per cent level of confidence were disclosed concerning short- and long-range idealistic level and total realistic level. In each instance where a significant difference was disclosed, the mentally retarded (MR) group expressed lower occupational aspirations than did the control (C) group. It may be noted that in each of these cases the control (C) group advanced their occupational aspirations from pre- to post-test. The mentally retarded (MR) group, however, decreased their occupational aspirations from pre- to post-test. This may mean that the significant differences were more a result of the control (C) group having advanced their aspirations rather than the mentally retarded (MR) group having reduced their aspirations.

One possible reason why the mentally retarded (MR) group reduced their occupational aspirations while the control (C) group advanced their occupational aspirations might be that the former, as a result of experiencing on-the-job training and receiving occupational information, may have realized a greater congruence between interest patterns and occupational choice. That is, the mentally retarded (MR) students may have been influenced by the independent variables to the point that he looked for occupational goals which were more appropriate to their interest patterns and abilities. The control (C) group, not experiencing on-the-job training or receiving occupational information, did not have the direct experience or information which might lead to more appropriate occupational choice.
Significant differences in total occupational aspiration and total realistic and idealistic levels of occupational choice between the mentally retarded (MR) and control (C) groups were discovered; therefore, hypothesis (1) must be rejected.

**Slow-Learner (A-B) Group and Control Group Comparisons**

Hypothesis (2) stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between the combined slow-learner (A-B) and control (C) groups as a result of offering occupational information to the former. The reader is referred to Table 5 for a review of the findings related to hypothesis (2). The slow-learner (A-B) group showed a significantly lesser magnitude of occupational aspiration than did the control (C) group in all occupational aspiration areas except short- and long-range idealistic-levels. The slow-learner (A-B) group exhibited a significantly lower total realistic level (10.579) than did the control (C) group (14.625). Differences in short-range realistic, long-range realistic and total realistic levels of occupational aspiration proved significant at the one per cent level of confidence. The slow-learner (A-B) group also professed a significantly lower (one per cent level of confidence) total occupational aspiration (30.342) than did the control (C) group (36.938). The total idealistic level score (19.500) expressed by the slow-learners (A-B) was also significantly lower than the total idealistic level score (22.625) reported by the control (C) group. The latter difference reached the five per cent level of confidence.

The finding that the adjusted F differences between the slow-learners (A-B) and control (C) groups reached significance in regard to short-
Table 5. A Comparison of Intelligence, Socio-Economic Status, Age, Pre-and Post-Test Occupational Aspiration Means, Significance of Difference (F) Between Means, and Final Adjusted Significance of Difference (Adjusted F) Between the Slow-Learner (A-B) and Control Groups

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>IQ</th>
<th>SE</th>
<th>Age (Months)</th>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>Slow-Learner (A-B)</td>
<td>39</td>
<td>95.737</td>
<td>2.105</td>
<td>203.895</td>
<td>6.368</td>
<td>4.737</td>
<td>7.500</td>
<td>5.842</td>
</tr>
<tr>
<td></td>
<td></td>
<td>95.737</td>
<td>2.105</td>
<td>203.895</td>
<td>6.368</td>
<td>4.737</td>
<td>7.500</td>
<td>5.842</td>
</tr>
<tr>
<td>Control</td>
<td>80</td>
<td>96.031</td>
<td>2.313</td>
<td>201.531</td>
<td>6.406</td>
<td>6.969</td>
<td>6.781</td>
<td>7.656</td>
</tr>
<tr>
<td></td>
<td></td>
<td>96.031</td>
<td>2.313</td>
<td>201.531</td>
<td>6.406</td>
<td>6.969</td>
<td>6.781</td>
<td>7.656</td>
</tr>
<tr>
<td>Difference (F)</td>
<td>.051</td>
<td>.932</td>
<td>.865</td>
<td>.902</td>
<td>6.478*</td>
<td>.901</td>
<td>6.865*</td>
<td>.691</td>
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<tr>
<td>Difference Between Two Groups (Adjusted F)</td>
<td>8.983**</td>
<td>7.585**</td>
<td>1.845</td>
<td>1.077</td>
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Total Occupational Aspiration

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>32.344</td>
<td>36.938</td>
<td>13.500</td>
</tr>
<tr>
<td>Difference (F)</td>
<td>.005</td>
<td>8.795**</td>
<td>.079</td>
</tr>
<tr>
<td>Difference Between Two Groups Adjusted F)</td>
<td>12.232**</td>
<td>15.275**</td>
<td>4.984*</td>
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</table>

** .01 per cent level of confidence
* .05 per cent level of confidence
and long-range realistic levels may indicate that offering occupational information tended to produce a more conservative approach to the realistic level of job selection. Such a difference was not noted in connection with short- and long-range idealistic levels and may indicate that occupational information had little influence on the idealistic level of occupational choice.

Findings indicated that the mentally retarded (MR) group did not differ significantly from the control (C) group (Table 4) in terms of short- and long-range realistic level of occupational aspiration while differences between these groups concerning short- and long-range idealistic levels proved significant. The reverse was true when comparisons were made between the slow-learners (A-B) and control (C) groups (Table 5). That is, short- and long-range realistic level scores were significantly different, but short- and long-range idealistic level scores were not significantly different. This may indicate that on-the-job training promoted a more conservative idealistic approach to job selection than did receiving occupational information. The other findings may also indicate that on-the-job training and/or occupational information promoted greater conservatism in total realistic level of occupational aspiration as well as a more appropriate total occupational aspiration.

Significant differences in total occupational aspiration and total realistic and idealistic levels of occupational choice between the combined slow-learner (A-B) and control (C) groups were discovered; therefore, hypothesis (2) must be rejected.

**Slow-Learner (A) Group and Control Group Comparisons**

Hypothesis (3) stated that there would be no significant difference
in the occupational aspirations or realism of occupational goals between the slow-learner (A) and control (C) groups as a result of offering occupational information to the former with induced support by the classroom teacher. The reader is referred to Table 6 for a summary of the results obtained concerning a comparison of the slow-learner (A) and control (C) groups. The slow-learner (A) group expressed a significantly lower total occupational aspiration (31.957) than did the control (C) group (36.938). This difference proved to be significant at the one per cent level of confidence. The slow-learner (A) group also showed a significant difference in total realistic level (one per cent level of confidence) as compared to the control (C) group. In this case the slow-learner (A) group professed a lesser degree of occupational aspiration (total realistic) than did the control (C) group. This same slow-learner (A) group expressed long-range realistic and total idealistic levels which were significantly (five per cent level of confidence) below that expressed by the control (C) group.

It may be seen from Table 6 that significant differences between the slow-learner (A) and control (C) groups did not occur in short- or long-range idealistic level or short-range realistic level. Significant differences between the slow-learner (A) and control (C) groups in long-range realistic and total realistic levels reached the five and one per cent level of confidence respectively. Such findings may indicate that teacher support for offering occupational information yields more influence on the realistic level of occupational choice than on the idealistic level of occupational choice.

Significant differences in total occupational aspiration and total
Table 6. A Comparison of Intelligence, Socio-Economic Status, Age, Pre-and Post-Test Occupational Aspiration Means, Significance of Differences (F) Between Means, and Final Adjusted Significance of Difference (Adjusted F) Between The Slow-Learner (A) and Control Groups

<table>
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<tr>
<th></th>
<th>N</th>
<th>IQ</th>
<th>SE</th>
<th>Age (Months)</th>
<th>Short-Range Realistic</th>
<th>Long-Range Realistic</th>
<th>Short-Range Idealistic</th>
<th>Long-Range Idealistic</th>
</tr>
</thead>
</table>

Difference (F)  
0.390 0.308 0.011 1.036 1.012 4.658* 3.312 .441 3.484 .108 .526

Difference Between Two Groups (Adjusted F)  
3.428 6.114* 2.589 .705

Total Occupational Aspiration Total Realistic Total Idealistic Total Pre Post Pre Post Pre Post Pre Post

Slow-Learner (A)  
34.826 31.957 15.870 12.087 18.957 19.435

Control  
32.344 36.938 13.500 14.625 19.375 22.625

Difference (F)  
1.848 3.879 2.910 2.999 .060 5.241*

Difference Between Two Groups (Adjusted F)  
10.533** 9.115** 6.372*

** .01 per cent level of confidence
* .05 per cent level of confidence
realistic and idealistic levels of occupational choice between the slow-learner (A) and control (C) groups were discovered; therefore, hypothesis (3) must be rejected.

**Slow-Learner (B) Group and Control Group Comparisons**

Hypothesis (4) stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between the slow-learner (B) and control (C) group as a result of offering occupational information to the former without the endorsement of the classroom teacher. The reader is referred to (Table 7) for a capitulation of the findings related to hypothesis (4). The slow-learner (B) group expressed a significantly lower (2.933) short-range realistic score than did the control (C) group (6.969). This significance reached the one per cent level of confidence. The same slow-learner (B) group also showed a significantly lower (8.267) total realistic level score than the control (C) group (14.625). The latter significance also reached the one per cent level of confidence. The total occupational aspiration scores (27.867) and (36.938) offered by these two groups proved significantly different at the five per cent level of confidence, the slow-learner (B) group having expressed lower aspirations.

It may be noted by comparing Table 6 with Table 7 that a significant difference existed between the slow-learner (A) and the control (C) groups in long-range realistic level (Table 6) and slow-learner (B) and the control (C) groups in short-range realistic level (Table 7). This finding may indicate that teacher support for the program offering occupational information was influential as concerns long-range realistic levels whereas lack of teacher support may have been a more direct
Table 7. A Comparison of Intelligence, Socio-Economic Status, Age, Pre-and Post-Test Occupational Aspiration Means, Significance of Differences (F) Between Means, and Final Adjusted Significance of Difference (Adjusted F) Between the Slow-Learner (B) and Control Groups

<table>
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<tr>
<th></th>
<th>N</th>
<th>IQ</th>
<th>SE (Months)</th>
<th>Age</th>
<th>Short-Range Realistic</th>
<th>Long-Range Realistic</th>
<th>Short-Range Idealistic</th>
<th>Long-Range Idealistic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Age</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Slow-Learner (B)</td>
<td>29</td>
<td>96.667</td>
<td>2.000</td>
<td>207.933</td>
<td>4.867</td>
<td>2.933</td>
<td>5.933</td>
<td>5.333</td>
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<tr>
<td>Difference (F)</td>
<td>.140</td>
<td>1.047</td>
<td>3.596</td>
<td>2.226</td>
<td>14.340**</td>
<td>.907</td>
<td>5.578*</td>
<td>.444</td>
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<td>Difference Between Two Groups (Adjusted F)</td>
<td>11.892**</td>
<td>2.334</td>
<td>.103</td>
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<table>
<thead>
<tr>
<th></th>
<th>Total Occupational Aspiration</th>
<th>Total Realistic</th>
<th>Total Idealistic</th>
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<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>Slow-Learner (B)</td>
<td>28.133</td>
<td>27.867</td>
<td>10.800</td>
</tr>
<tr>
<td>Control</td>
<td>32.344</td>
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</tr>
<tr>
<td>Difference (F)</td>
<td>1.918</td>
<td>8.983**</td>
<td>3.056</td>
</tr>
<tr>
<td>Difference Between Two Groups (Adjusted F)</td>
<td>4.485*</td>
<td>10.448**</td>
<td>.721</td>
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</tbody>
</table>

**.01 per cent level of confidence
*.05 per cent level of confidence
influence on short-range realistic level. The fact that the total N for the slow-learner (B) group was but 29 may also have distorted the findings.

Significant differences in total occupational aspiration and total realistic level of occupational choice between the slow-learner (B) and control (C) groups were discovered; therefore, hypothesis (4) must be rejected.

Mentally Retarded Group and Slow-Learner (A-B) Group Comparisons

Hypothesis (5) stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between the mentally retarded (MR) and combined slow-learner (A-B) groups as a result of offering on-the-job training and occupational information to the former and occupational information only to the latter. The reader may wish to review Table 8 for a survey of the results obtained which relate to this comparison. No significant occupational aspiration differences were detected between the mentally retarded (MR) and slow-learner (A-B) groups.

It may be that the on-the-job training program was too limited to have a significant influence on the mentally retarded (MR) group. In as much as only seven of the 15 boys had on-the-job training the experience may not have had adequate depth. Another assumption was that the offering of occupational information to high school boys with limited academic ability may have been the significant factor in determining their realism of occupational choice.

Vocational Rehabilitation Counselors noted that those students that had received occupational information prior to on-the-job training adjusted better to work assignments.
Table 8. A Comparison of Intelligence, Socio-Economic Status, Age, Pre- and Post-Test Occupational Aspiration Means, Significance of Difference (F) Between Means, and Final Adjusted Significance of Difference (Adjusted F) Between the Mentally Retarded and Slow-Learner (A-B) Groups

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<tr>
<th></th>
<th>N</th>
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<th>Short-Range Realistic Pre</th>
<th>Post</th>
<th>Long-Range Realistic Pre</th>
<th>Post</th>
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<tr>
<td>Mentally Retarded</td>
<td>15</td>
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<td>6.750</td>
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<td>8.313</td>
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<td>Difference (F)</td>
<td></td>
<td>78.578**</td>
<td>.451</td>
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<td>.126</td>
<td>.430</td>
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<td>.373</td>
<td>.011</td>
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<tr>
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<td>Post</td>
<td>Pre</td>
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<tr>
<td>Mentally Retarded</td>
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<td></td>
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<tr>
<td>Slow-Learner (A-B)</td>
<td></td>
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<tr>
<td>Difference (F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>.048</td>
<td>7.956**</td>
<td>.159</td>
</tr>
<tr>
<td>Difference Between Two Groups (Adjusted F)</td>
<td></td>
<td>3.045</td>
</tr>
</tbody>
</table>

** .01 per cent of confidence
* .05 per cent of confidence
Significant differences in total occupational aspiration and total realistic and idealistic levels of occupational choice between the mentally retarded (MR) and combined slow-learner (A-B) groups were not discovered; therefore, hypothesis (5) may be accepted to be true.

Mentally Retarded Group and Slow-Learner (A) Group Comparisons

Hypothesis (6) stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between the mentally retarded (MR) and slow-learner (A) group as a result of offering on-the-job training and occupational information to the former and occupational information only but with support by the classroom teacher to the latter. The reader is referred to Table 9 for a summary of the results related to this comparison. No significant occupational aspiration differences were noted between the mentally retarded (MR) and slow-learner (A) groups.

Significant differences in total occupational aspiration and total realistic and idealistic levels of occupational choice between the mentally retarded (MR) and slow-learner (A) groups were not discovered; therefore, hypothesis (6) may be accepted to be true.

Mentally Retarded Group and Slow-Learner (B) Group Comparisons

Hypothesis (7) stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between the mentally retarded (MR) and slow-learner (B) groups as a result of offering on-the-job training and occupational information to the former and occupational information only and without the endorsement of the classroom teacher to the latter. The reader should
Table 9. A Comparison of Intelligence, Socio-Economic Status, Age, Pre-and Post-Test Occupational Aspiration Means, Significance of Differences (F) Between Means, and Final Adjusted Significance of Difference (Adjusted F) Between the Mentally Retarded and Slow-Learner (A) Groups

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>IQ</th>
<th>SE</th>
<th>Age (Months)</th>
<th>Short-Range Realistic</th>
<th>Long-Range Realistic</th>
<th>Short-Range Idealistic</th>
<th>Long-Range Idealistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference (F)</td>
<td></td>
<td>56.709</td>
<td>.744</td>
<td>3.801</td>
<td>.261 2.923</td>
<td>.248 .902</td>
<td>3.019 3.950</td>
<td>1.906 11.452**</td>
</tr>
<tr>
<td>Difference Between Two Groups</td>
<td></td>
<td></td>
<td></td>
<td>1.232</td>
<td>.256</td>
<td>.224 1.965</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Occupational Aspiration</th>
<th>Total Realistic</th>
<th>Total Idealistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>------------------</td>
<td>----</td>
<td>-------</td>
</tr>
<tr>
<td>Slow-Learner (A)</td>
<td>34.826</td>
<td>31.957</td>
</tr>
<tr>
<td>Difference (F)</td>
<td></td>
<td>1.140</td>
</tr>
<tr>
<td>Difference Between Two Groups</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** .01 per cent level of confidence
* .05 per cent level of confidence
survey Table 10 for a numerical summary of the findings related to hypothesis (7). No significant occupational aspiration differences were found between the mentally retarded (MR) and slow-learner (B) groups.

Significant differences in total occupational aspiration and total realistic and idealistic levels of occupational choice between the mentally retarded (MR) and slow-learner (B) groups were not determined; therefore, hypothesis (7) may be accepted to be true.

**Slow-Learner (A) Group and Slow-Learner (B) Group Comparisons**

Hypothesis (8) stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between slow-learner group (A) and slow-learner group (B) as a result of offering both groups occupational information but with classroom teacher support for offering occupational information to slow-learner group (A) only. The reader should review Table 11 for a numerical overview of the data collected which related to hypothesis (8). No significant occupational aspiration differences were found between the slow-learners of groups (A and B). This finding may have indicated that teacher attitudes toward offering occupational information had little influence on occupational choice.

Significant differences in total occupational aspiration and total realistic and idealistic levels of occupational choice between the slow-learner (A) and slow-learner (B) groups were not discovered; therefore, hypothesis (8) may be accepted to be true.
Table 10. A Comparison of Intelligence, Socio-Economic Status, Age, Pre- and Post-Test Occupational Aspiration Means, Significance of Difference (F) Between Means, and Final Adjusted Significance of Difference (Adjusted F) Between the Mentally and Slow-Learner (B) Groups

<table>
<thead>
<tr>
<th></th>
<th>Age (Months)</th>
<th>Short-Range Realistic</th>
<th>Long-Range Realistic</th>
<th>Short-Range Idealistic</th>
<th>Long-Range Idealistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentally Retarded</td>
<td>195.188</td>
<td>6.750</td>
<td>4.125</td>
<td>7.878</td>
<td>5.375</td>
</tr>
<tr>
<td>Slow-Learner (B)</td>
<td>207.933</td>
<td>4.867</td>
<td>2.933</td>
<td>5.933</td>
<td>5.333</td>
</tr>
<tr>
<td>Difference (F)</td>
<td>47.439**</td>
<td>.035</td>
<td>9.161**</td>
<td>2.208</td>
<td>2.599</td>
</tr>
<tr>
<td>Difference Between Two Groups (Adjusted F)</td>
<td>.291</td>
<td>.012</td>
<td>2.118</td>
<td>.346</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentally Retarded</td>
<td>31.563</td>
<td>23.188</td>
<td>14.625</td>
<td>9.500</td>
</tr>
<tr>
<td>Slow-Learner (B)</td>
<td>28.133</td>
<td>27.867</td>
<td>10.800</td>
<td>8.267</td>
</tr>
<tr>
<td>Difference (F)</td>
<td>1.122</td>
<td>2.303</td>
<td>2.779</td>
<td>.696</td>
</tr>
<tr>
<td>Difference Between Two Groups (Adjusted F)</td>
<td>1.590</td>
<td>.019</td>
<td>2.343</td>
<td></td>
</tr>
</tbody>
</table>

** .01 per cent level of confidence
* .05 per cent level of confidence
Table 11. A comparison of Intelligence, Socio-Economic Status, Age, Pre- and Post-Test Occupational Aspiration Means, Significance of Differences (F) Between Means, and Final Adjusted Significance of Difference (Adjusted F) Between the Two Slow-Learner (A and B) Groups

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>IQ</th>
<th>SE</th>
<th>Age (Months)</th>
<th>Pre</th>
<th>Post</th>
<th>Pre</th>
<th>Post</th>
<th>Pre</th>
<th>Post</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slow-Learner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slow-Learner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(B)</td>
<td>19</td>
<td>96.667</td>
<td>2.000</td>
<td>207.933</td>
<td>4.867</td>
<td>2.933</td>
<td>5.933</td>
<td>5.333</td>
<td>8.667</td>
<td>9.667</td>
<td>8.667</td>
<td>9.933</td>
</tr>
<tr>
<td>Difference (F)</td>
<td>.658</td>
<td>.464</td>
<td>3.193</td>
<td>4.969*8.226**</td>
<td>5.385*</td>
<td>1.129</td>
<td>.009</td>
<td>.195</td>
<td>1.334</td>
<td>.394</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference Between Two Groups (Adjusted F)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.234</td>
<td>.041</td>
<td>.254</td>
<td>.223</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Total Occupational Aspiration</th>
<th>Total Realistic</th>
<th>Total Idealistic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>Slow-Learner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(A)</td>
<td>34.826</td>
<td>31.957</td>
<td>15.870</td>
</tr>
<tr>
<td>Slow-Learner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(B)</td>
<td>28.133</td>
<td>27.867</td>
<td>10.800</td>
</tr>
<tr>
<td>Difference (F)</td>
<td>4.931*</td>
<td>2.075</td>
<td>7.547**</td>
</tr>
<tr>
<td>Difference Between Two Groups (Adjusted F)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**.01 per cent level of confidence
*.05 per cent level of confidence
Total Occupational Aspiration

The data on page 44 indicated that the mean score for total occupational aspiration was 37 with a standard deviation of approximately (12.25) (Haller and Miller, 1961). Table 12 affords the reader a comparison of the mean total occupational aspiration scores obtained from this study with that offered by Haller and Miller (1961).

Table 12. A Comparison of the Haller and Miller Total Occupational Aspiration Scores with Total Occupational Aspiration Post-Test Scores of this Study.

<table>
<thead>
<tr>
<th>TOA Post-Test Scores</th>
<th>Haller &amp; Miller</th>
<th>Mentally retarded (A-B)</th>
<th>Slow-Learner (A)</th>
<th>Slow-Learner (B)</th>
<th>Controls (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Scores:</td>
<td>37.000</td>
<td>23.188</td>
<td>30.342</td>
<td>31.957</td>
<td>27.867</td>
</tr>
</tbody>
</table>

Since the mentally retarded (MR) group expressed a mean total occupational aspiration score (23.188) which approximates one standard deviation below the mean score (37.000) obtained by the "normal" boys of the Haller and Miller (1961) study, it may be assumed that the mental retardate's post-test occupational aspirations were more in accord with their abilities than was the case before they experienced on-the-job training and received occupational information. It might be anticipated that offering on-the-job training and occupational information should promote a more factual evaluation of total occupational aspiration than should offering occupational information without the experience of on-the-job training. Thus, it may be possible that the slow-learners would aspire somewhat higher occupationally than the mentally retarded (MR) group and somewhat below the control (C) group.
It was also conceivable that teacher endorsement for offering occupational information (as with slow-learner (A) group) promoted a more appropriate degree of total occupational aspiration than did the lack of teacher endorsement for the slow-learner (B) group. It might also be anticipated that the control (C) group should express a total occupational aspiration somewhat below that of the "normal" group because the control (C) group possess a lesser degree of intelligence and possibly occupy a lower socio-economic position. This, also, was not the case. Thus, it might be said that the control (C) group did not aspire occupationally in accord with ability.

**Expression Level and Time-Dimension Comparisons**

The reader is referred to Table 13 for an overview of the results of this investigation as compared to the results of a study conducted by Haller and Miller (1961) both of which employed the Occupational Aspiration Scale. Haller and Miller offered an average of the scores from each of three samples for each of the two (OAS) items related to expression level (realistic or idealistic) and time-dimension periods (short-range or long-range). The highest possible mean score was nine while the lowest possible mean score was zero. The author, with the permission of Dr. Haller, established combined means for the three samples offered by Haller and Miller. Since the subjects employed in the Haller and Miller study were "intellectually normal" senior high school boys, the author used these figures as "norm-group means." Table 13, then, offers the reader a comparison of the results of this study with the "norms" established by Haller and Miller. Each score
Table 13. A Comparison of the Haller and Miller Average Expression Level and Time-Dimension Scores With Those of This Study

<table>
<thead>
<tr>
<th></th>
<th>Short-Range</th>
<th>Long-Range</th>
<th>Short-Range</th>
<th>Long-Range</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Realistic</td>
<td>Idealistic</td>
<td>Realistic</td>
<td>Idealistic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haller and Miller</td>
<td>3.28</td>
<td>4.18</td>
<td>5.12</td>
<td>5.72</td>
<td>3.79</td>
<td>5.42</td>
</tr>
<tr>
<td>Mentally Retarded</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Test</td>
<td>3.375</td>
<td>3.937</td>
<td>4.312</td>
<td>4.156</td>
<td>3.656</td>
<td>4.235</td>
</tr>
<tr>
<td>Post-Test</td>
<td>2.062</td>
<td>2.687</td>
<td>3.562</td>
<td>3.281</td>
<td>2.375</td>
<td>3.422</td>
</tr>
<tr>
<td>Pre-Test</td>
<td>2.368</td>
<td>2.921</td>
<td>4.684</td>
<td>5.197</td>
<td>2.645</td>
<td>4.875</td>
</tr>
<tr>
<td>Slow-Learner (A)</td>
<td>3.674</td>
<td>4.261</td>
<td>4.391</td>
<td>5.067</td>
<td>3.967</td>
<td>4.739</td>
</tr>
<tr>
<td>Post-Test</td>
<td>2.956</td>
<td>3.087</td>
<td>4.587</td>
<td>5.348</td>
<td>3.022</td>
<td>4.858</td>
</tr>
<tr>
<td>Slow-Learner (B)</td>
<td>2.433</td>
<td>2.966</td>
<td>4.333</td>
<td>4.333</td>
<td>2.700</td>
<td>4.333</td>
</tr>
<tr>
<td>Pre-Test</td>
<td>1.466</td>
<td>2.666</td>
<td>4.833</td>
<td>4.966</td>
<td>2.067</td>
<td>4.900</td>
</tr>
<tr>
<td>Slow-Learner (B)</td>
<td>3.203</td>
<td>3.390</td>
<td>4.765</td>
<td>4.922</td>
<td>3.375</td>
<td>4.844</td>
</tr>
<tr>
<td>Control Group</td>
<td>3.484</td>
<td>3.828</td>
<td>5.469</td>
<td>5.687</td>
<td>3.656</td>
<td>5.656</td>
</tr>
</tbody>
</table>
of the study, as presented in Tables 4 through 11, represents combined scores of two groups and this had to be reduced by half so that they might be compared to the Haller and Miller data.

It will be noted on Table 13 that the pre-test scores for the mentally retarded (MR) group approached and in one instance (short-range realistic) surpassed the "norm" scores offered by Haller and Miller. This finding may indicate a somewhat unrealistic approach to occupational goal selection because a mentally retarded student realistically should set his occupational aspirations somewhat below that of the "normal" senior high school male.

Pre-test results disclosed that in several instances the mentally retarded (MR) group exceeded the expressed occupational aspirations of the control (C) group. The fact that the mentally retarded (MR) group found themselves with each other throughout most of the academic day may have instilled in them a greater sense of "group belongingness" and as a result they may have professed occupational aspirations which were restricted in range. The other groups involved in the study were not together throughout the academic day and may not have developed a "closeness of association." Thus, their occupational aspirations may have shown greater dispersion.

The fact that the mentally retarded (MR) group represented the lowest of the socio-economic ratings may have tended to promote more similarity in occupational aspiration. Edwards and Wilson (1961) proposed that children from lower-class families permit more peer group influences of attitudinal development than do children from middle-class families. Association with peers of like mental ability and like socio-economic
backgrounds may produce like levels of occupational aspiration. The
mental retardate's high pre-test aspirations may have been the result
of ignorance of the world of work; a desire to win parent, teacher, or
peer approval; a desire to live up to parental expectations; or com­
pensation for feelings of inferiority or insecurity.

Post-test results indicated that the mentally retarded (MR)
students reduced their occupational goals to what might be considered
more in accord with their ability. The mentally retarded (MR) group
may have aspired occupationally at a level more in accord with ability
after receiving on-the-job training and occupational information because
they had developed a more adequate self-concept and were more able to
compare their potentialities with the levels at which they may seek
employment. Post-test results may have reflected a greater knowledge
of self, a greater acceptance of self, and more information about the
world of work. The society in which the subjects lived often regarded
unskilled or semi-skilled work as having little prestige. Occupational
information may act as a force to overcome such an attitude and develop
acceptance of "lower level" positions. It is important to the mental
health of the retardate and slow-learner that he accept and resign
himself to unskilled and semi-skilled positions, according to Hoppock
(1957).

A review of Table 13 will disclose the fact that the slow-
learner (A-B) group lowered their occupational aspirations relative
to the realistic level (short-range, long-range and total) in each
instance (post-test) following the dissemination of occupational in­
formation. The final realistic level scores were more like what might
be expected of students academically, and/or mentally, retarded. This pattern did not hold true for idealistic level scores. In fact, this group (A-B) advanced their idealistic level of occupational aspiration following occupational information instruction.

Table 13 also offers data related to the slow-learner (A) group. This group followed the same occupational aspiration pattern as did the slow-learner (A-B) group. That is, each post-test measure related to realistic level was somewhat lower than the pre-test measure of that expression level. The reverse was true for idealistic level scores. Post-test measure of idealistic level scores showed an advance in aspiration.

An evaluation of Table 13 will reveal that the slow-learner (B) group expressed the same aspiration trends as did the slow-learner (A-B) and slow-learner (A) groups. That is, post-test measures of realistic level were somewhat lower than pre-test measures of realistic level and post-test measures of idealistic level were somewhat higher than pre-test idealistic level scores.

All groups involved in the present study with the exception of the mentally retarded (MR) group advanced their idealistic level aspirations from pre- to post-test. This may mean that on-the-job training is more influential than occupational information in promoting greater appropriateness of idealistic level occupational choice. The control (C) group, that group not receiving on-the-job training or occupational information, showed a trend in occupational goal selection which was directly opposite to that of the mentally retarded (MR) group. That is, on each sub-test score this group (C) showed an increase in occupational
aspiration on all post-test measures. This group proved somewhat unrealistic on pre-test measure and additionally so on post-test measure. One possible reason why the control (C) group aspired so highly may have been that "over-aspiration" is sometimes a compensatory gesture related to unsatisfactory interpersonal relationships. It is a recognized fact that a poor academic record may be associated with poor interpersonal family relationships (Dynes, Clarke, and Dinitz, 1956). Thus, students who are academically retarded and who have not brought into focus ability and occupational aspiration may experience warped family relationships. The latter may result in "over-aspiring."

All groups involved in the study with the exception of the control (C) group reduced their realistic level aspirations from pre to post-test. This may mean that the independent variables—on-the-job training and occupational information—(with or without teacher endorsement)—served to promote a more realistic outlook on the world of work. It should be kept in mind that the small number of students assigned to the mentally retarded (MR) and slow-learner groups may have influenced the results.

The results of this study seem to have indicated that on-the-job training coupled with occupational information affords the student an evaluation of himself in a more realistic light. Such a self-evaluation may have been the result of the students actually work experience and their adaptation to this work while simultaneously exploring other fields of work through occupational information.
CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this chapter is to summarize the study and to present conclusions. Recommendations for further research related to this dissertation are also offered.

Summary of the Study

The study was designed to test the effect of occupational information on the career aspirations of high school boys with limited academic ability. The sample, comprising mentally retarded and slow-learning senior high school boys, was drawn from two senior high schools in Reno and Las Vegas, Nevada. The sample was divided into four groups: (1) the mentally retarded group, 15 in number, consisted of all those boys enrolled in special classes for the mental retardate in both senior high schools; (2) the slow-learner (A) group, 20 in number, composed of students from the lowest of a three track modified ability grouping system; (3) the slow-learner (B) group, 19 in number, also comprised of students from the lowest of a three track modified ability grouping system; and (4) the control (C) group, 80 in number, made up of randomly selected "low-intellectual-and-achievement-level" track three boys. A fifth group, slow-learner (A-B), totaling 39, resulted by combining slow-learner group A and slow-learner group B.
The three measurement instruments employed in the study were:

1. the Occupational Aspiration Scale (OAS) used for eliciting occupational goal choices,
2. the Socio-Economic Scale by Jeffs used to establish a socio-economic rating for each subject involved, and
3. the Wechsler Adult Intelligence Scale (WAIS) used to measure mental ability. The OAS yields several time-dimension periods and expression levels of occupational aspiration: short-range realistic, long-range realistic, short-range idealistic, and long-range idealistic. This instrument also produces a total occupational aspiration score.

Each student involved in the study was pre-tested with the OAS, assigned a socio-economic weight, and administered the WAIS. Each student was also post-tested with the OAS. Several variables were applied to the various groups in the interim between pre- and post-testing. The mentally retarded (MR) group received on-the-job training and occupational information. The slow-learner (A) group received occupational information and had support by the classroom teacher for the dissemination of such information. The control (C) group received neither on-the-job training nor occupational information.

The realism or appropriateness of occupational aspiration as employed in this study was established by comparing the obtained results with "norm-group means" offered in Tables 12 and 13. The reader should be careful not to confuse realism or appropriateness of occupational aspiration with the realistic expression level score of the OAS. The analysis of covariance technique was employed to evaluate the data collected. Analysis of covariance permits adjustment of mean scores obtained from post-testing to compensate for differences between
groups obtained from pre-testing.

Mentally Retarded (MR) and Control (C) Groups

The first hypothesis stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between the mentally retarded (MR) and control (C) groups as a result of offering on-the-job training and occupational information to the former. The following results were obtained:

1. A significant difference (.05 level) in short-range idealistic level of occupational aspiration between the mentally retarded (MR) and control (C) groups was discovered.

2. A significant difference (.01 level) in long-range realistic level of occupational aspiration between the combined slow-learner (A-B) and control (C) groups was discovered.

3. A significant difference (.01 level) in total occupational aspiration between the combined slow-learner (A-B) and control (C) groups was discovered.

4. A significant difference (.01 level) in total realistic level of occupational aspiration between the combined slow-learner (A-B) and control (C) groups was discovered.

5. A significant difference (.05 level) in total idealistic level of occupational aspiration between the combined slow-learner (A-B) and control (C) groups was discovered.

Combined Slow-Learner (A-B) and Control (C) Groups

The second hypothesis stated that there would be no significant differences in the occupational aspirations or realism of occupational
goals between the combined slow-learner (A-B) and control (C) groups as a result of offering occupational information to the former. The following results were obtained:

1. A significant difference (.01 level) in the short-range realistic level of occupational aspiration between the combined slow-learner (A-B) and control (C) groups was discovered.

2. A significant difference (.01 level) in long-range realistic level of occupational aspiration between the combined slow-learner (A-B) and control (C) groups was discovered.

3. A significant difference (.01 level) in total occupational aspiration between the combined slow-learner (A-B) and control (C) groups was discovered.

4. A significant difference (.01 level) in total realistic level of occupational aspiration between the combined slow-learner (A-B) and control (C) groups was discovered.

5. A significant difference (.05 level) in total idealistic level of occupational aspiration between the combined slow-learner (A-B) and control (C) groups was discovered.

Slow-Learner (A) and Control (C) Groups

The third hypothesis stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between the slow-learner (A) and control (C) groups as a result of offering occupational information to the former with induced support by the classroom teacher. The following results were obtained:

1. A significant difference (.05 level) in long-range realistic
level of occupational aspiration between the slow-learner (A) and control (C) groups was discovered.

2. A significant difference (.01 level) in total occupational aspiration between the slow-learner (A) and control (C) groups was discovered.

3. A significant difference (.01 level) in total realistic level of occupational aspiration between slow-learner (A) and control (C) groups was discovered.

4. A significant difference (.05 level) in total idealistic level of occupational aspiration between the slow-learner (A) and control (C) groups was discovered.

**Slow-Learner (B) and Control (C) Groups**

The fourth hypothesis stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between the slow-learner (B) and control (C) groups as a result of offering occupational information to the former without the endorsement of the classroom teacher. The following results were obtained:

1. A significant difference (.01 level) in short-range realistic level of occupational aspiration between the slow-learner (B) and control (C) groups was discovered.

2. A significant difference (.05 level) in total occupational aspiration between the slow-learner (B) and control (C) groups was discovered.

3. A significant difference (.01 level) in total realistic level of occupational aspiration between the slow-learner (B) and control (C)
groups was discovered.

**Mentally Retarded (MR) and Combined Slow-Learner (A-B) Groups**

The fifth hypothesis stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between the mentally retarded (MR) and combined slow-learner (A-B) groups as a result of offering on-the-job training and occupational information to the former and occupational information only to the latter. The following results were obtained:

1. No significant differences in occupational aspirations between the mentally retarded (MR) and combined slow-learner (A-B) groups were discovered.

**Mentally Retarded (MR) and Slow-Learner (A) Groups**

The sixth hypothesis stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between the mentally retarded (MR) and slow-learner (A) groups as a result of offering on-the-job training and occupational information to the former and occupational information only but with induced support by the classroom teacher to the latter. The following results were obtained:

1. No significant differences in occupational aspirations between the mentally retarded (MR) and slow-learner (A) groups were discovered.

**Mentally Retarded (MR) and Slow-Learner (B) Groups**

The seventh hypothesis stated that there would be no signi-
significant differences in the occupational aspirations or realism of occupational goals between the mentally retarded (MR) and slow-learner (B) groups as a result of offering on-the-job training and occupational information to the former and occupational information only and without the endorsement of the classroom teacher to the latter. The following results were obtained:

1. No significant differences in occupational aspirations between the mentally retarded (MR) and slow-learner (B) groups were discovered.

Slow-Learner (A) and Slow-Learner (B) Groups

The eighth hypothesis stated that there would be no significant differences in the occupational aspirations or realism of occupational goals between the slow-learner group (A) and slow-learner group (B) as a result of offering both groups occupational information but with classroom teacher support for offering occupational information to slow-learner group (A) only. The following results were obtained:

1. No significant differences in occupational aspirations between the mentally retarded (MR) and slow-learner (B) groups were discovered.

Total Occupational Aspiration

Mean post-test total occupational aspiration scores for the various groups, with the exception of the control (C) group, proved somewhat below the mean total occupational aspiration score (37.000) obtained by a group of "normal" or "average" senior high school boys from Michigan (Haller and Miller, 1961). The Michigan group was em-
ployed in this study as a "norm-group." The subjects involved in the study were somewhat below the "normal," or "average," group in intellectual measurement. The group of subjects, therefore, might be expected to aspire less highly than the "average" group if their vocational goals are to be considered realistic. The implication here, disregarding control (C) group results, is that offering on-the-job training and/or occupational information tends to produce a total occupational aspiration which is more congruous with mental ability and academic performance.

**Expression Level and Time-Dimension**

"Norm-group combined means" for expression level (realistic and idealistic) and time-dimension (long- and short-range) were established by the writer from data offered by Haller and Miller (1961). Such "norm-group means" permitted a comparison of expression level and time-dimension scores obtained in this study with those obtained by Haller and Miller (1961).

The results of this study disclosed that the mentally retarded (MR) group reduced their expression level and time-dimension occupational aspirations after receiving on-the-job training and occupational information to what may be considered more in accord with mental ability and academic performance. The implication is that offering on-the-job training and occupational information promoted a more factual or realistic selection of occupational goals.

The slow-learner (A) group followed the same pattern as did the mentally retarded (MR) group with the exception of idealistic level scores. Post-test idealistic level scores proved to be greater than
pre-test idealistic level scores. The assumption that offering occupa-
tional information tended to encourage a more practical or realistic
approach to occupational goal selection was only partially substantiated.

The slow-learner (B) group followed precisely the same trend as
did the slow-learner (A) group. Thus, it might be said that classroom
teacher support of an occupational information program was not especially
influential in determining occupational choice.

The control (C) group expressed post-test occupational
aspirations which were in all instances greater than pre-test scores.
The control (C) group was composed of track three students or students
of lesser ability than "normal", or "average", students. It might be
assumed, then, that these students should possess occupational desires
which are somewhat below the hierarchical prestige ranking of the
occupational goals of "average" students. This assumption was not
verified. In fact, half of the post-test scores of the control (C)
group exceeded the occupational aspiration scores of the "norm-group."
The results related to control (C) group occupational aspiration indi-
cate that this group was impractical and unrealistic. Perhaps offering
on-the-job training and/or occupational information to the control (C)
group would have produced a more sound approach to occupational goal
choice.

Conclusions

1. Offering on-the-job training and occupational information
to mentally retarded senior high school boys tended to promote a more
appropriate Total Occupational Aspiration.

2. Offering on-the-job training and occupational information
to mentally retarded senior high school boys tended to promote a more appropriate Realistic Level of occupational choice.

3. Offering on-the-job training and occupational information to mentally retarded senior high school boys tended to promote a more appropriate Idealistic Level of occupational choice.

4. There is a need for study to determine the advantages of on-the-job experiences for high school age academically disinclined youth.

5. There would appear to be a need for a study to determine a more appropriate method for classifying mentally retarded children for educational purposes.

6. Offering occupational information only to slow-learning senior high school boys tended to have little effect upon the Idealistic Level of occupational choice.

7. On-the-job training may have had a greater influence on the Idealistic Level than on the Realistic Level of occupational choice.

8. Classroom teacher endorsement of an occupational information program appeared to have had little influence on the occupational choice of slow-learning senior high school boys.

Recommendations

Certain recommendations for further study seem appropriate and have been included here:

1. This research appears to have a possible need for revision of the curriculum of the two senior high schools to provide for the dissemination of occupational information to the student with limited
academic ability.

2. An investigation might be undertaken into the possible adaptations and improvements of the Syllabus of Occupational Information for Mentally Retarded Senior High School Boys.

3. There would appear to be a need for the development of a similar syllabus for senior high school girls with limited academic ability.

4. Follow-up research should be undertaken to determine the long-term effect of offering occupational information and/or on-the-job training to senior high students with limited academic ability.

5. There may be a need for a more thorough evaluation of students with "normal" or above intelligence who are assigned to special classes for the mentally retarded or slow-learners. The results of this study revealed the upper range of the subjects investigated to be 127 as measured by the Wechsler Adult Intelligence Scale (WAIS).

6. There is a need for careful analysis of the benefits to be derived from early identification and assessment of the skills and abilities possessed by the individual who appears to have limited academic ability.

7. There is a definite need for continued exploration into the educational program being offered the mentally retarded and slow-learner. It would appear that the program offering for the academically limited should be more realistic in terms of his employment potential.
Total Score ______

OCCUPATIONAL ASPIRATION SCALE
Revision 1

Your Name ____________________________

Today's Date __________________________
Month Day Year

Your Age ______________________________

Instructions
(To be read aloud by the administrator).

1. Be sure to write your name, today's date, and your age in the spaces above.

2. This set of eight questions concerns jobs.

3. Read EACH QUESTION carefully. They are not always the same.

4. YOU ARE TO CHECK ONE JOB IN EACH QUESTION. MAKE SURE IT IS THE BEST ANSWER YOU CAN GIVE TO THE QUESTION.

5. Answer every question. Don't omit any.

6. If you don't know what one of the jobs is, just ignore it.

7. On the next page there are two practice questions. Let's try them.

   (Turn to next page).

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To the teacher: Practice questions A and B are to be read aloud.

Practice Question A. Of the jobs listed in this question, which is the BEST ONE you are REALLY SURE YOU CAN GET when your SCHOOLING IS OVER?

A.1 Watchmaker
A.2 Senator
A.3 Public relations man
A.4 Ditch digger
A.5 News-stand operator
A.6 Beautician
A.7 Fireman
A.8 Boxer
A.9 Secretary
A.10 Movie star

Practice Question B. Of the jobs listed in this question, which ONE would you choose to have when you are 30 YEARS OLD, if you were FREE TO HAVE ANY of them you wished?

B.1 File clerk
B.2 Steeple jack
B.3 Floor walker in a store
B.4 Ambassador to a foreign country
B.5 Grocery clerk
B.6 Wrestler
B.7 Nurse
B.8 T.V. sports announcer
B.9 Forest ranger
B.10 Music teacher
Question 1. Of the jobs listed in this question, which is the BEST ONE you are REALLY SURE YOU CAN GET when your SCHOOLING IS OVER?

1.1 Welfare worker for a city government
1.2 United States representative in Congress
1.3 United States Supreme Court Justice
1.4 Sociologist
1.5 Filling station attendant
1.6 Night watchman
1.7 Policeman
1.8 Corporal in the Army
1.9 County agricultural agent
1.10 Lawyer

Question 2. Of the jobs listed in this question, which ONE would you choose if you were FREE TO CHOOSE ANY of them you wished when your SCHOOLING IS OVER?

2.1 Singer in a night club
2.2 Member of the board of directors of a large corporation
2.3 Railroad conductor
2.4 Railroad engineer
2.5 Undertaker
2.6 Physician (doctor)
2.7 Clothes presser in a laundry
2.8 Banker
2.9 Accountant for a large business
2.10 Machine operator in a factory
Question 3. Of the jobs listed in this question which is the BEST ONE you are REALLY SURE YOU CAN GET when your SCHOOLING IS OVER?

3.1 Dock Worker
3.2 Owner-operator of a lunch stand
3.3 Public school teacher
3.4 Trained machinist
3.5 Scientist
3.6 Lumberjack
3.7 Playground director
3.8 Shoeshiner
3.9 Owner of a factory that employs about 100 people
3.10 Dentist

Question 4. Of the jobs listed in this question, which ONE would you choose if you were FREE TO CHOOSE ANY of them you wished when your SCHOOLING IS OVER?

4.1 Restaurant waiter
4.2 Electrician
4.3 Truck driver
4.4 Chemist
4.5 Street sweeper
4.6 College professor
4.7 Local official of a labor union
4.8 Building contractor
4.9 Traveling salesman for a wholesale concern
4.10 Artist who paints pictures that are exhibited in galleries
Question 5. Of the jobs listed in this question, which is the BEST ONE you are REALLY SURE YOU CAN HAVE by the time you are 30 YEARS OLD?

5.1 Farm hand
5.2 Mail carrier
5.3 County judge
5.4 Biologist
5.5 Barber
5.6 Official of an international labor union
5.7 Soda fountain clerk
5.8 Reporter for a daily newspaper
5.9 State governor
5.10 Nuclear physicist

Question 6. Of the jobs listed in this question, which ONE would you choose to have when you are 30 YEARS OLD, if you were FREE TO HAVE ANY OF THEM you wished?

6.1 Janitor
6.2 Head of a department in state government
6.3 Cabinet member in the federal government
6.4 Musician in a symphony orchestra
6.5 Carpenter
6.6 Clerk in a store
6.7 Coal miner
6.8 Psychologist
6.9 Manager of a small store in a city
6.10 Radio announcer
Question 7. Of the jobs listed in this question, which is the BEST ONE you are REALLY SURE YOU CAN HAVE by the time you are 30 YEARS OLD?

7.1 Mayor of a large city
7.2 Milk route man
7.3 Captain in the army
7.4 Garbage collector
7.5 Garage mechanic
7.6 Insurance agent
7.7 Architect
7.8 Owner-operator of a printing shop
7.9 Airline pilot
7.10 Railroad section hand

Question 8. Of the jobs listed in this question, which ONE would you choose to have when you are 30 YEARS OLD, if you were FREE TO HAVE ANY of them you wished?

8.1 Civil engineer
8.2 Author of novels
8.3 Diplomat in the United States Foreign Service
8.4 Taxi driver
8.5 Newspaper columnist
8.6 Share cropper (one who owns no livestock or farm machinery, and does not manage the farm)
8.7 Plumber
8.8 Bookkeeper
8.9 Streetcar motorman or city bus driver
8.10 Minister or Priest
APPENDIX B
SOCIO-ECONOMIC SCALE

Please look at the description below and answer the questions that follow. It is not necessary that every item under a description fit your family, just so most of the items generally describe your family.

A. This family earns more money than it can spend; college does not mean much to them; they belong to the "best" or most exclusive clubs; they often live in very large houses with large yards; they frequently have servants; they usually drive "big" cars (Cadillac, Lincoln, etc.).

B. This family has professional jobs (such as doctors and lawyers); they usually go to college and graduate; they are usually very active in clubs and organizations; they frequently live in large houses which they own; they frequently own two cars.

C. This family works for wages and salaries; they may own small businesses or farms; they usually spend most of the money they make; they sometimes use a college education as a means of getting them into social clubs and similar organizations; they frequently drive a relatively new car (not more than 4 or 5 years old); this is the typical "American family."

D. This family usually doesn't have much money; they work hard; the children usually do not go to college; they often live in rather small homes (3 or 4 rooms) which they may not own but rent; they often drive "older" cars (more than 4 or 5 years old).

E. The job the father of this family has usually doesn't pay much money; the father frequently changes jobs; they usually drive a "real old" car (maybe 8 or more years old) or if they drive a newer car they have trouble paying for it; they are often "in hoc."

Check the above description which best fits your family now.

A._______
B._______
C._______
D._______
E._______

100
APPENDIX C
Tabulation of scores of 134 subjects as determined by the Wechsler Adult Intelligence Scale (Ungrouped Data in Rank Order)

<table>
<thead>
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<th>Scores of the Mentally Retarded Group</th>
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<td>60</td>
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N = 15
Range = 45

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N = 20
Range = 41

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N = 80

Range = 76
SYLLABUS OF OCCUPATIONAL INFORMATION FOR MENTALLY
RETARDED HIGH SCHOOL BOYS (BARNUM, 1964)

(A Sample Lesson)

LESSON NUMBER VI

FREIGHT

Truck Driving

Part 2

I. OBJECTIVE

A. TO STUDY THE VARIOUS KINDS OF TRUCK DRIVING

II. METHODS AND PROCEDURE

A. OUTLINE OF LESSON

1. Display pictures of trucks
   a. heavy trucks
   b. light trucks
   c. delivery trucks

2. Trace truck routes on the blackboard
   a. across country hauls
   b. short hauls
   c. local delivery
3. Blackboard outline
   a. breakdown of different kinds of truck driving\(^1\)
      (1) heavy trucking
          (a) must be good driver to qualify considering the congested city streets, tight parking spaces, narrow alleys and narrow loading platforms
      (2) light truck driving
          (a) store deliveries
          (b) route deliveries include receiving money, making change, giving receipts, and making C.O.D. deliveries
      (3) route deliveries\(^2\)
          (a) milk
          (b) bread
          (c) laundry
          (d) ice cream
   b. some training procedures
      (1) start as a warehouseman
      (2) go out on trucks with regular driver
      (3) get a job


c. warehouseman
   (1) loading and unloading
      (a) trains
      (b) trucks
   (2) storage
      (a) lifting
      (b) maintenance
   (3) delivery
      (a) trucks

B. FACT SHEET
1. Present outlook
   a. very good

2. Future trend
   a. upward

3. Age requirements
   a. heavy truck driving
      (1) 25 years of age
   b. regular truck driving
      (1) 21 years of age (sometimes under 21)

4. Health requirements
   a. physically strong
   b. good eyesight
   c. good hearing
5. Earnings
   a. local truck drivers
      (1) average hourly wage $2.56 per hour
   b. Helpers
      (1) $1.75 per hour
      (a) wages vary, usually high, due to overtime worked
6. Training
   a. on the job mostly
7. Other requirements
   a. drivers license
   b. chauffers license
   c. pleasant personality
8. Requirements
   a. complete grade school
   b. 2 to 4 years of high school
9. Chance for advancement
   a. good
10. Benefits
    a. required state and federal protection
    b. insurances
    c. vacation
11. Work conditions
   a. depends on trucking job
      (1) at-home delivery
         (a) taxi cab driving
         (b) across country runs
      (2) away from home delivery
         (a) out-door work
         (b) strenuous
         (c) long hours

12. Union

13. Location
   a. universal

III. SUMMARY

A. TEACHER EXPECTATION OF STUDENT
   1. It is expected that the student will acquire specific knowledge about truck drivers

B. VALUE TO STUDENTS
   1. Truck driving offers job possibilities for young men who can qualify to be truck drivers
   2. Truck driving offers job possibilities for school drop outs

C. SUGGESTED FOLLOW-UP BY STUDENTS
   1. It is suggested that student confer with teacher
      a. make arrangements to take high school drivers course

IV. VOCABULARY

Transportation: system of moving persons or goods from one place to another⁴

V. AIDS

A. CLASSROOM AIDS

1. Blackboard

2. Posters

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