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A Study of Education Beyond High School and Its Relationship to the Occupations Chosen

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A STUDY OF EDUCATION BEYOND HIGH SCHOOL AND ITS
RELATIONSHIP TO THE OCCUPATIONS CHOSEN

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
Doyle Eugene Winter
December, 1967

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CHAPTER I

THE PROBLEM

The high school dropout is currently one of the major problems facing education. The writer has heard many statements, by colleagues, other professional educators, and laymen, such as: "The high school dropout will not be able to achieve as well in the occupational world as the high school graduate because the dropout lacks the necessary training and education." If acquiring more education permits more opportunity in the occupational world, then it would suggest that high school graduates who seek additional training or education would be able to achieve more than the graduate who gains employment immediately upon graduating. Publications by the United States Department of Labor indicate that the average annual income plus the expected lifetime earnings of the person with less schooling is lower than a person who has completed high school or has gone on to college. The above statements tend to indicate that there are definite vocational advantages to going to college.

Several questions can be raised. What are the vocational benefits of attending college compared to the high school graduate? Will college benefit all students occupationally? Is college the only way to achieve occupational success? Is education a factor in occupational success?

Can occupational success be achieved without additional education?

I. THE PROBLEM

The purpose of this study was to attempt to find out if there is a general occupational value to the individual in going to college or getting occupational training beyond high school and if there are values, what the specific values might be. The results of this study were obtained from a survey of one high school graduating class, and it is hoped the results can be used to demonstrate some of the problems perceived by people currently employed in various occupational fields. It is expected that the evidence presented here could be used to supplement the information presently available and to point up specific advantages and disadvantages regarding education and training beyond high school as can be deduced from studying a graduating class in Hoquiam, Washington.

II. DEFINITIONS OF TERMS

Job Satisfaction

"Any combination of psychological, physiological, and environmental circumstances that causes a person truthfully to say 'I am satisfied with my job'" (Hoppock, 1935, p. 47).

Opportunity for Advancement

Chance of promotion to a higher position as perceived by the respondents, i.e., higher title or higher salary.

Class Rank

Numerical position assigned on the basis of accumulated grade point average.

III. LIMITATIONS OF THE STUDY

This study has several limitations. First, the study is limited to 121 graduates. These graduates are from one graduating class, 1954, and from one high school, located in Hoquiam, Washington. A second limitation is that seventeen graduates of the above class could not be located.

IV. HYPOTHESES

The general hypothesis of the present study states that the occupational opportunities are greater for high school graduates who seek additional training or education than for high school graduates who seek employment immediately following graduation. The specific hypotheses are as follows:

Hypothesis I: High school graduates who go to college perceive their present job as more satisfying than

graduates who do not go to college.

Hypothesis II: High school graduates who obtain additional specialized training perceive their present job as more satisfying than graduates who do not seek additional training.

Hypothesis III: High school graduates with college education perceive more opportunity for advancement in their present job than graduates who do not have college education.

Hypothesis IV: High school graduates with additional specialized training perceive more opportunity for advancement in their present job than graduates who do not have additional specialized training.

CHAPTER II

REVIEW OF RELATED LITERATURE

The literature available in the specific area of post high school education and job satisfaction and opportunity for advancement is limited. This review is an attempt to bring together information related to the educational attainment of workers, the benefit of education, and the relationship between education and how the worker sees his position in terms of opportunities and satisfaction.

The educational level of American workers is continuing its rapid rise. The main force behind this upswing has been operating throughout history in that each successive generation gets more education than its predecessors.

In the past quarter century, American workers have lengthened their formal education from an average (median) of one year of high school in 1940 to just over four years of high school in March 1965. Although a median of twelve years of school completed was attained for the first time in March 1959 (and has not risen substantially during the past six years), there has been an increase (to 58 per cent from 50) in the proportion of those persons eighteen and over in the labor force who have completed four years of high school or more. The percentage of persons in the labor force who have completed four years of college or more has also risen--to twelve from ten per cent (Johnston & Hamel, 1966, p. 252).

Looking at educational attainment another way, the number of high school graduates in each major occupational group has increased. Since our society has assumed formal

education is beneficial to all and attendance in school is required, this accounts for the increase in graduates. For example, in the major occupational group of farmers and farm managers, the percentage of high school graduates increased from 19 per cent in 1940 to 59 per cent in 1960 (Cowhig and Beale, 1965, p. 626).

The above examples indicate that there has been a general upgrading in the educational level of all people in all occupations, not just the workers.

"Presently nearly 1 out of every 8 working men and 1 out of every 10 working women is a college graduate. In 1952, the corresponding proportions were less than 1 in 12 for both men and women" (Johnston, 1965, p. 517). A similar increase in the number of men and women with college degrees have become part of the working force but the total number of women now working accounts for the differences in percentage.

The increase in community colleges throughout the nation also indicates the increase in the number of people attending college as well as the general rise in population. Many vocational schools are in their infancy. These programs for post high school work and the advent of vocational curriculum in the high schools along with the increase in the Government training programs should keep more students in school and provide for better workers.

Nearly half (44 per cent) of the boys and girls who were graduates in 1965 and were not yet in the labor force were attending business or vocational schools compared with only 8 per cent of the dropout boys and single girls (Hamel, 1966, p. 647).

Young people's usual difficulties in the job market because of lack of work experience are currently further compounded by the growing number of young workers competing for available jobs, coupled with the decrease in the relative proportions of jobs which require little training or skills. An additional factor is the growing emphasis on a high school diploma as a minimal educational requirement for even the lesser skilled jobs (Perrelia, 1964, p. 522).

In the State of Washington alone it is estimated that the number of persons reaching eighteen in 1965 was 61,400 (Manpower Challenge Washington, 1960, p. 5). Recognizing this fact, the young men and women who leave school before completing high school impose upon themselves a great disadvantage in their role as workers. In a society where even the high school graduate often needs additional schooling or training for many jobs, the dropout often lacks the basic education needed to prepare him for the available jobs or to qualify for more advanced job training.

Another indication of the preferred position of the high school graduate relative to the dropout is the type of work the graduate obtains for his first regular job.

The proportions of the 1965 male graduates who were white-collar workers or craftsmen was twice the proportion of the 1964 and 1965 dropouts in these occupations while greater proportions of dropouts than graduates were farm or non farm laborers in October 1965. Young women graduates were more likely than dropouts to be clerical workers while dropouts were more heavily concentrated in blue-collar and service occupations (Hamel, 1966, p. 647).

It appears that the workers most in demand in the years ahead will be those with a marketable skill as evidenced by education or specialized training. Higher formal education is practically a "must" nowadays for entry into the professions.

Quite often in schools pupils ask the question as to the benefit a high school diploma offers to someone who is not going on to college, or who is going to enter an occupation where the emphasis is on aptitude and practical know-how, not formal education. It has been pointed out by Miller (1963) that craftsmen and foremen as a group, average about \$36,000 more in a lifetime if they are high school graduates. Even the semi-skilled operatives and kindred workers stand to earn some \$24,000 extra due at least partly to a high school diploma. Although it is still possible for exceptional individuals to achieve professional status in some fields without formal higher education, such opportunities seem likely to dwindle in the years ahead.

Schooling pays off in job security as well. It is easier for an educated person to find a steady job. That

is why "the unemployment rates among persons with some college training is about one-fourth as high as among those with less than eight years of schooling" (Miller, 1963). Job opportunities are also increasing fastest in occupations requiring the most education and training.

A summary of some research by two Columbia University sociologists associated with Columbia's Bureau of Applied Social Research (Jaffe & Adams, 1965), appears to refute some of the above information, however. The report states that high school dropouts can and do succeed in modern industry and have done so consistently through industry's periods of greatest technological advance. They found that half or more than half of the total number of persons employed in manufacturing and other industries are dropouts. Their study of the educational level of industrial workers between 1950 and 1960 indicated that advancing technology does not necessarily require its workers to have more formal schooling, at least the kind now offered in most schools. It appears that the offering of more vocational courses might influence the training one could acquire by remaining in school, therefore making the high school graduate more valuable to industry.

They found among all workers, manual and white collar, there were increases in educational attainment between 1950 and 1960.

There are plenty of jobs in our economy in which dropouts can perform at least satisfactorily enough to hold down jobs; not less than half the jobs were in this category in 1960. Hence, the higher unemployment rate among dropouts of all ages must be attributed to lack of sufficient job vacancies, to discrimination of hiring practices, or other reasons.

We feel that education is valuable for its own sake, especially for those interested in learning. To sell schooling because "modern technology requires it," especially to those persons who are uninterested or unable to continue their education for whatever reasons, is doing education and the people a grave injustice (Jaffe & Adams, 1965, p. 380).

It appears from this review of literature that there are two points of view. One indicates that education plays an important part in occupational success. Persons with education usually get better entry occupations, higher salaries, have less unemployment, and have more opportunity for advancement. The second point of view, which is supported by Jaffe & Adams (1965) suggests that education is not as important as we have been lead to believe. High school dropouts have been and are currently holding jobs in industries where technological changes are being made. Perhaps education itself is not the only factor in satisfactory employment. In the study that follows it is hoped that the effects of post high school education upon job satisfaction and opportunity for advancement can be identified.

CHAPTER III

METHODS AND PROCEDURES

This study surveyed the 121 graduates of the class of 1954 of Hoquiam High School, Hoquiam, Washington. This class was chosen for the following reasons: (1) The persons surveyed had had an opportunity in terms of time to attend and complete college or vocational school, or start and complete apprenticeships; (2) these persons had had a minimum of four years and a maximum of eleven years' exposure to their occupational choice; (3) the writer had reason to assume, with the Superintendent's confirmation, that this graduating class was representative of Hoquiam graduating classes in size, in number of people who applied to a college, and in the number of people working in the local area; (4) these graduates were employed in varied occupations.

I. QUESTIONNAIRE

A twenty-three question opinionnaire was devised to test the hypotheses on job satisfaction and opportunity for advancement stated on page 3. The complete questionnaire can be found in Appendix B. Questions asked are stated below as they pertain to each section so the reader might be better able to understand and follow the results and discussion.

9. Circle the number that shows how you generally feel about your employers, bosses, and supervisors.
 1 ----- 9
 Very dissatisfied Very well satisfied
10. Circle the number that shows how you feel about changing to another job.
 9 ----- 1
 Would not change jobs Gladly change

Four questions concerned opportunity for advancement.

These questions were:

6. What do you feel your opportunities are for advancement on your present job?
 9 ----- 1
 Excellent Poor
7. What are the future employment opportunities for your present occupation?
 1 ----- 9
 Large decrease Large increase
 in opportunities in opportunities
8. Circle the number that shows how much responsibility you would like to have on your job.
 9 ----- 1
 Like to make most Don't like to
 of the decisions make decisions
11. Circle the number that shows how you feel your present abilities compare with fellow employees or colleagues.
 1 ----- 9
 Their abilities are Their abilities are
 less than mine better than mine

Six additional completion type questions were of a general nature and supplemented the job satisfaction inquiry and could not be subjected to statistical tests:

5. Circle the number that shows the type of special training that is required to do your job.
 1 ----- 9
 No experience Formal education

12. Circle the category that best represents your average monthly salary before taxes.
- | | |
|----------------|----------------|
| \$240 or less | \$392 to \$477 |
| \$241 to \$336 | \$478 to \$584 |
| \$337 to \$391 | \$585 or more |
20. What job do you think you will be doing in 1975?
21. What job would you like to be doing in 1975?
22. If you were in high school again, is there any help concerning occupations you would like to have received?
23. Is there any help concerning occupations you would like to have at the present time?

The questions regarding job satisfaction and opportunities for advancement called for responses on rating scales with a range of one through nine. The numbers were spaced evenly and each scale had at least three written descriptions spaced under the scale to help the graduates evaluate their attitudes and opinions. Each graduate was asked to circle the number which best represented his attitudes or opinions.

The opinionnaires were sent April 24, 1965, to 109 of the graduates. Eleven graduates were not sent opinionnaires because their addresses were unknown. Four of the 109 sent were returned marked "Moved--Address Unknown." Seventy-nine were completed and returned by May 4, 1965. On May 12, 1965, a card was sent to each graduate who had not responded. Four additional opinionnaires were returned by May 17, 1965. This brought the total returned to 83.

The 83 returned opinionnaires represent 76 per cent of the total sent.

According to the questions designed to create categories, the inspection of returns allowed classification of education and training level into three groups:

Group I consisted of graduates who indicated that they had not gone to college or vocational school and had no specialized training. Of the 83 opinionnaires returned, 30 were placed in this group. These included 7 men and 23 women.

Group II consisted of graduates who attended college up through three years but did not complete the programs. Also in this group were graduates who had attended vocational school, served an apprenticeship, or had been involved in some sort of specialized training. Twenty-eight respondents were placed in this category--17 men and 11 women.

Group III was made up of graduates who had attended and completed at least a four-year college program. Of the 83 questionnaires returned, 25 were placed in this group. Of these 17 were men and 8 were women.

Of the total returned opinionnaires, 36.14 per cent were placed in Group I, 33.73 per cent were assigned to Group II, and 30.12 per cent were designated as Group III.

II. ANALYSIS OF THE DATA

In dealing with research where relationships between variables are important, a major concern is the determination of whether or not these observed relationships are of sufficient magnitude to be considered significant. The present study was designed to explore the opinions of the respondents to see if there is a relationship between groups. Since the sample was selected from one graduating class of one high school, the relationship, if any, cannot be taken as definitive. The five per cent level of confidence was accepted for a difference to be considered significant ($P < .05$).

The first step in the analysis was to make a frequency distribution and determine the mean score on the rating scale for each group on each question. Next the F test (Garrett, 1958, p. 281) was used to see if there was a difference among variances of the three groups. If a difference was significant at the pre-determined level ($P < .05$) then individual group means were tested by the t test (Garrett, 1958, p. 281). If a significant difference between group means was found, a check to see if the groups were drawn from common population was made using Bartlett's test (Garrett, 1958, p. 286) for homogeneity of variance.

These statistical tests were chosen to help determine whether educational level has a significant effect on job satisfaction and opportunities for advancement.

CHAPTER IV

RESULTS

The results presented in this chapter are divided into three sections. Section I describes results which pertain to the hypotheses dealing with job satisfaction. Section II presents results which relate to the hypotheses concerning opportunities for advancement. Section III shows results obtained from less specific questions on the opinionnaire.

I. RESULTS CONCERNING JOB SATISFACTION

The following four questions were treated statistically to test the hypotheses on job satisfaction: Question 3, Draw a circle around the number which most clearly shows how you generally feel about your present job; Question 4, Circle the number that shows how you feel about the type of work you are now doing; Question 9, Circle the number that shows how you generally feel about your employers, bosses, and supervisors on the type of job you now hold; and Question 10, Circle the number that shows how you feel about changing to another job.

On Question 3, which asked the respondent, " . . . how do you generally feel about your present job?" an F of .6403 was obtained which is less than the .05 level and

indicates there is no significant difference among the three groups. Sixty-six (79.5%) of the subjects answering this question indicated they were "generally well satisfied or very pleased with their job." Only nine people were less satisfied and no one reported feeling he hated his job.

Question 4 asked the respondent to "Circle the number that shows how you feel about the type of work you are now doing." The F of 3.65 was significant at the .05 level of confidence. Since it was found that there was a difference among groups, the t test was used to find where the difference was. Table I shows that the only significant difference was between Group I (no college or training) and Group III (college graduates). Group III indicated they were enthusiastic about the type of work they were doing while Group I showed they were merely interested in their type of work. With 45 df, $t = 2.544$, the difference between means of Groups I and III was significant at the .05 level. To check for equal variances between Groups I and III, Bartlett's test for homogeneity of variance was used. With 21/23 df, $F = 1.597$ which is not significant at the .05 level. This shows that the difference is a function of mean differences, not error variances (Garrett, 1958, p. 287. No significant mean differences could be found between Groups I and II or between Groups II and III.

TABLE I

SUMMARY OF t-TESTS ON SATISFACTION WITH PRESENT TYPE
OF WORK WITH GROUPS DIVIDED BY EDUCATIONAL LEVEL

Mean		Mean		df	t
Group I	6.681	Group II	7.259	49	1.111
Group II	7.259	Group III	8.000	50	1.668
Group I	6.681	Group III	8.000	45	2.544*

Legend: Group I (No college or training)
Group II (Some college or training)
Group III (College graduates)

*Significant at .05 level

Question 9 pertains to the subject's feelings about his employers, bosses, and supervisors on the type of job he now holds. The ratings ranged the full scale from "very dissatisfied" to "very well satisfied" with the majority feeling they are "all right" to "very well satisfied." One subject from each group was very dissatisfied. The F ratio was less than one, which indicates there was no significant difference among group means.

On the final question directed at opinions of job satisfaction, again F was less than one, which detected no significant difference among group means. Question 10 asked the respondents' feelings about changing jobs. Thirty-four per cent of the total group indicated they would not change to another job. Thirty-six per cent disclosed they would

change if the job was better. It was interesting to note that three people from Group III (college graduates) marked they would possibly change, compared to one person in Group II (some college and training) and two people in Group I (no college or training). Also one college graduate showed he would like to change jobs and one pointed out he would gladly change.

Results in Relationship to Hypothesis on Job Satisfaction

On the basis that there was a significant difference between Groups I and III regarding how they expressed themselves about the type of work they were now doing, it was shown that high school graduates who go on to college perceive their present job as more satisfying than graduates who do not go to college. Therefore, Hypothesis I is supported only on a minimal basis since only one of four questions showed a significant difference between groups.

The second hypothesis stating that high school graduates who obtain additional specialized training perceive their present job as more satisfying than graduates who do not seek additional training, must be rejected since no significant difference could be found between Groups I and II on any of the four questions.

II. RESULTS CONCERNING OPPORTUNITY FOR ADVANCEMENT

The following four questions were treated statistically to test the hypotheses on opportunity for advancement: Question 6, What do you feel your opportunities are for advancement on your present job; Question 7, What are the future employment opportunities for your present occupation; Question 8, Circle the number that shows how much responsibility you would like to have on your job; and Question 11, Circle the number that shows how you feel your present abilities compare with fellow employees or colleagues.

To provide background for the presentation of results on opportunity for advancement, Table II was produced to show the occupational classification of the three groups. Note the range in Group II compared to Groups I and III.

"What do you feel your opportunities are for advancement on your present job?" was asked by Question 6. Table III, page 24, shows the distribution of reported feelings about opportunity for advancement. Subjects' choices ranged from excellent to poor. With $F = 1.00$, no significant difference could be established among groups.

Question 7 asked about future employment opportunities for your present occupation. Sixty-seven per cent thought their occupation would have the same number of opportunities or would increase in opportunities in the

TABLE II
DISTRIBUTION OF SUBJECTS INTO OCCUPATION GROUPS USED BY THE
U. S. DEPARTMENT OF LABOR (Manpower, 1960, p. 11)

Occupational Group	Group I		Group II		Group III	
	Men	Women	Men	Women	Men	Women
Professional and Technical				2	16	7
Proprietors and Managers	1		5	1		
Clerical and Sales		12	1	7		
Skilled	1		5			
Semi-skilled	2		1			
Service		9	2	1		
Unskilled	3		3		1	
Farmers and Farm Workers						
Totals	7	23*	17	11	17	8**

Legend: Group I (no college or training)
Group II (some college or training)
Group III (college graduates)

*Includes two women who had never worked
**Includes one woman who had never worked

TABLE III
DISTRIBUTION OF SUBJECTS' REPORTED FEELINGS
ABOUT OPPORTUNITY FOR ADVANCEMENT

Group	Rating Scale								
	Excellent 9	8	7	Adequate 6	5	4	3	2	Poor 1
Group I	2		7		5		2		1
Group II	11	1	3		3	1			5
Group III	5	6	3	2	2		1	1	2

Legend: Group I (No college or training)
Group II (Some college or training)
Group III (College graduates)

future. The difference in the group's means approached the significance level with an $F = 3.03$, but did not reach the pre-established level of confidence. Therefore, it is shown that there is not a perceived difference among the three groups in their future employment opportunities.

Question 8 inquires about the amount of responsibility a person would like to have on his job. Using the F test to see if there was a difference among groups regarding this question, it was found that $F = 6.37$, which was significant at the .01 level. Since there was a difference, the t test was calculated to find where the difference lay. It was found that the difference in amount of responsibility desired between Groups I and II and Groups II and III was not significant. These data are shown in Table IV. The

difference between the amount of responsibility between Groups I and III was significant at the .01 level with 44 df, $t = 3.129$.

TABLE IV

SUMMARY OF t TESTS BETWEEN EDUCATIONAL GROUPS PERTAINING TO AMOUNT OF RESPONSIBILITY DESIRED ON THE JOB

Mean		Mean		df	t
Group I	6.047	Group II	7.192	46	1.795
Group II	7.192	Group III	8.000	49	1.921
Group I	6.047	Group III	8.000	44	3.129**

Legend: Group I (No college or training)
 Group II (Some college or training)
 Group III (College graduates)
 **Significant at .01 level

The results of the t test were tested for equal variances. The variance of Group III was divided into the variance of Group I, with 20/23 df, $F < 3.349$ which is significant beyond the .01 level. Therefore, some doubt is cast on means alone as the source of difference. Group variances may be accounting for some of the difference between means. There is insufficient evidence to say that Group III (college graduates) want more responsibility than Group I (no college or training beyond high school).

Question 11 asks the respondent to compare his abilities with his fellow employees or colleagues.

Forty-three per cent of the subjects stated their colleagues' abilities are equal to their own; 33.7 per cent stated that their abilities were superior to their colleagues. Only five people, of whom two were college graduates, felt that their abilities might be less than their fellow employees.

When the F test was applied to see if there was a difference among groups, it was found that the F ratio was less than one and that there was no significant difference among groups.

Results in Relationship to Hypothesis on Opportunities for Advancement

No significant difference could be found among groups when asked directly about opportunities for advancement, and there was no significant difference among groups regarding future employment possibilities and the subjects' comparisons of abilities with their peers. Also no significant difference could be found between Groups I and II and Groups II and III when questioned about the amount of responsibility on the job.

On this basis, the hypothesis must be rejected which states that high school graduates with additional specialized training perceive more opportunity for advancement in their present job than graduates who do not have additional specialized training.

Question 9 pertains to the responsibility one takes on one's job. The difference in responses between Groups I and III tend to show that there was more perception of opportunity for advancement for college graduates. Although the difference found between Groups I and III was significant at the .01 level of confidence using a t test, doubt is placed on this by finding a significant F when testing homogeneity of variance. It cannot be confidently said that the two groups (I and III) were drawn from the same populations with regard to desire for advancement. It cannot be concluded that high school graduates with a college education perceive more opportunity for advancement in their present job than graduates who do not have a college education. Hypothesis III is rejected.

III. RESULTS OBTAINED FROM ADDITIONAL QUESTIONS ON THE OPINIONNAIRE

One question which at first seemed most distinguishing between groups was number 5. The question asked what type of special training is required to do your job? As can be seen in Table V, the type of training required for the work the respondent was engaged in follows closely the educational preparation of each group. Group I (no college or training) indicated that "no experience," "past experience," and "on the job training" were the requirements for the type of

TABLE V
PERCENTAGE OF EACH GROUP IN TYPE OF TRAINING
REQUIRED TO DO PRESENT JOB

Type of Training	Group I	Group II	Group III
No Experience	14.2%	19.2%	7.6%
Past Experience	21.4	0.0	3.8
On the Job Training	64.2	46.1	7.6
Vocational School Training	0.0	15.3	0.0
Formal Education	0.0	19.2	80.7

Legend: Group I (No college or training)
Group II (Some college or training)
Group III (College graduates)

work in which they were now employed. The largest percentage (64.2%) of Group I specified "on the job training" as most instrumental in their work.

Group II (some college or training) reported all five types of training were needed for their employment. Again, "on the job training" was indicated by most of the respondents (46.1%) in this group. Responses by Group III (college graduates) point out that "no experience," "past experience," "on the job training," and "formal education" were needed in the type of work in which they were employed. "Formal education" was selected by 80.7 per cent of this group as most important.

A difference among groups was apparent when $F = 21.32$ which was significant at the .01 level of confidence. Each group was then compared to each other by use of the t test. Table VI shows significant differences were found in the means between Groups I and II, Groups I and III, and between Groups II and III.

To check the homogeneity of variance, Bartlett's test was applied. A significant difference was found between Groups I and II with $F = 2.245$, with 25/27 df, F was greater than the .05 level. Significance was also found between Groups I and II with $F = 2.887$; with 25/27 df, F was beyond the .01 level of confidence. Between Groups II and III, $F = 1.285$ which was not significant.

TABLE VI

SUMMARY OF t TESTS BETWEEN EDUCATIONAL GROUPS PERTAINING
TO TYPE OF SPECIAL TRAINING REQUIRED

Mean		Mean		df	t
Group I	4.071	Group II	5.461	53	2.672*
Group II	5.461	Group III	7.807	51	3.546**
Group I	4.071	Group III	7.807	53	6.550**

Legend: Group I (No college or training)
Group II (Some college or training)
Group III (College graduate)

*Significant at .05 level

**Significant at .01 level

It appeared the categories selected for each group were accurate in that each group sought the type of work for which it trained. However, the F tests showed a lack of homogeneity of variance and suggests that although means are different, the groups were drawn from populations with uncommon variances.

Money earned, the topic of Question 12, did not differentiate between groups. Only 16.6 per cent of Group I was making \$585 a month or more compared to 53.57 per cent in Group II and 44 per cent in Group III. In Group I, even though they have a low total percentage, five of the seven men are in this category. Of this total, 93.33 per cent are men. (For possible explanation, see discussion.)

Questions 20 and 21 asked "What job do you think you will be doing in 1975?" and "What job would you like to be doing in 1975?" Except for intended humorous comments, most people responded they would be working in an advanced position in the same type of work they were presently employed.

Question 22 produced an array of answers. The question asked, "If you were in high school again, is there any help concerning occupations you would like to have received?" Not all respondents made comments. Statements about counseling were made by twenty persons. The majority of the statements were similar to these examples:

I cannot remember having any counseling about my future.

I think counselors should be more available to talk to,
and they should have more literature available to
give students.

Some type of counseling regarding future occupations.

More personal evaluations and counseling--a program
organized to help students.

Several comments took the opposite point of view.

For example:

Counselors were helpful.

My counseling and help from the school administration
was more than adequate.

Better counseling (as it has now improved) through
guidance in the high school program and counselors'
knowledge of where the present job opportunities lie.

Occupational information was requested thirteen times, with need for more college information listed eleven times. There were eight statements asking for more and better interest and aptitude tests and evaluation. Six people wanted more experience with business machines and five wanted more vocational-type experience. A need for practical financial information was requested twice and more "social speaking" and college preparation was stated once each.

It was interesting to note that all but four of Group III (college graduates) commented on this question regarding occupational information, while eight from Group II (some college and training) made no comment; thirteen, which is approximately half of the respondents in Group I (no college or training), had no comment or question on this question.

Question 23 inquired "Is there any help concerning occupations you would like to have at the present time?" Only seventeen comments were made to answer this question. Several indicated it was too late and the rest stated that they were attending evening classes, community college classes, or were seeking additional training of various kinds.

CHAPTER V

DISCUSSION

The results of this study tend to parallel the idea presented by Jaffe and Adams (1965) that education does not play as important a part in occupational success as people in education would like to believe. In this study post high school is the focus and Jaffe and Adams' concern was with dropouts.

Although a significant difference was found between Groups I and III regarding how they felt about the type of work in which they were presently engaged, no other reliable differences could be found between other combinations of groups on any of the other questions concerning job satisfaction.

No significant difference was found between groups on any of the questions relating to opportunity for advancement. There was apparent significance on Question 8 dealing with amount of responsibility desired on the job. The t test between Group I (no college or training) and Group III (college graduates) was significant at the .01 level. When these groups were checked for homogeneity of variance and a significant F was found, doubt was placed as to the means alone being the source of difference between groups.

For this reason the difference was not accepted. In this regard Wert, Neidt, and Ahmann (1954, p. 184) report, "There is increasing evidence, however, that the necessity for the homogeneity of variance is not as serious a consideration as it was formerly thought to be"--for analysis of variance. " . . . it is probably appropriate to consider significant t values between the specific group means only as indications of areas where additional research may be desirable." Perhaps significant t value between Groups I and III lend only partial support to inferences about the two groups; therefore, replication is necessary to establish their reliability.

Additional information about the make-up of the three groups might give some indication as to why the study showed these results:

The composition of Group I (no college or training) includes eighteen respondents in the upper half of the class ranking and thirteen in the lower half. Of the eighteen, sixteen were female and one was male, while seven of the thirteen were female and the other six were male.

In Group II (some college or training), twelve were in the upper half (nine female and three male) and sixteen were in the lower half (two female and fourteen male) of the class ranking.

Group III (college graduates) consisted of twenty-two, eight female and thirteen male, in the upper half. There were three males in the lower half.

From this information it is shown that fifty-two of the sixty-one persons in the upper half of class rank responded while only thirty-two of the sixty in the lower half of the class ranking responded. The difference in high school performance, perhaps, is indicative of subsequent performance by the respondents, and places a limitation on interpretation of job satisfaction and opportunity for advancement. Also, 74 per cent of Group I was made up of women and most of these are now housewives who are possibly more happy with their total family situation than with the type of work they are presently doing. This total family satisfaction may have influenced the results.

The average number of jobs held by the individuals in each group has affected a trend in the results. Group I held an average of 2.54 jobs while Group II engaged in 3.42 jobs and Group III have been employed in an average of 2.16 jobs. Some college and training could have influenced the largest average, Group II, by allowing advancement where Group I (no college or training) might well not qualify. The small average in Group III shows that time spent in college had an effect in the sense that this would reduce total "experience" on the job a minimum of four years.

Group III prepared for a particular job by going to college; therefore, they might be expected to change jobs less often.

The same time factor as above may have influenced the results regarding money earned. Groups I and II had several more years to obtain varied positions as well as advance on pay scales, while the college graduates, at the time of this study, were in the relative beginning of their vocational pursuits.

A final factor which must be considered is the factor of honesty with oneself in answering the opinionnaire. No check or evaluation of this factor was included in the study.

There is a definite need for replication of this study. There are indications that possible differences toward occupational success do exist between respondents with no college or training and respondents who are college graduates. It is suggested that future studies should include only men or men and career women and should attempt to reach a larger segment of the population. It is also suggested that the opinionnaire attempt to evaluate the part obtaining an education plays in total satisfaction and how total satisfaction might influence vocational satisfaction. The opinionnaire should be improved so that opportunities for advancement could be more clearly defined for

the respondent. A question asking how do you see your opportunities for advancement compared to other members of the class needs to be included if richer comparisons are to be made.

Explicit comments on the opinionnaire indicate that counseling still plays an important part in helping students make occupational choices. The counselor can help in evaluating students' academic abilities, personal interests and aptitudes, and personal desires along occupational lines. It should be pointed out that not all students perceive benefit by obtaining a college education. Some students perceive themselves to be successful without additional education.

ABSTRACT

The purpose of this study was to evaluate job satisfaction and opportunity for advancement in relationship to educational levels beyond high school.

It was hypothesized that additional education or specialized training would increase an individual's job satisfaction and opportunity for advancement.

An opinionnaire was sent to 109 graduates of one high school asking about their occupational choice and education and training levels.

It was found by computing statistical tests on the three educational levels that there was limited significance at the .05 level between no college or specialized training and college graduate levels regarding opinions on job satisfaction. No significant difference was accepted between groups pertaining to opportunities for advancement.

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APPENDIX A

COVER LETTER

April 24, 1965

Dear

Will you please take ten to fifteen minutes to help me. I am working toward a Master's Degree at Central Washington State College. The return of the following questionnaire will provide information for a thesis. The subject of this study is the occupational choice of the graduates of Hoquiam High School in 1954.

It is hoped that through your cooperatin in answering these questions regarding your experiences, school administrators and counselors will be better able to counsel students regarding vocational choice and opportunity. Your frank and honest opinions are requested.

I hope that you will take the time required to complete the questionnaire and return it to me by May 4th. A self-addressed, stamped envelope is provided for your convenience.

If by post mark or other possible means your questionnaire is identified, the information which you provide will be kept completely confidential.

Thank you for your cooperation.

Sincerely,

Doyle Winter

Please do not return this letter.

APPENDIX B

QUESTIONNAIRE

DIRECTIONS: Read each question carefully. Most questions require that you select and circle the best answer. In answering the other questions follow the directions indicated for that question.

1. Circle the item which best describes what you are doing at the present time.

- | | |
|--------------------|-------------------------|
| Housewife | Unemployed |
| Employed full-time | Student |
| Employed part-time | In military service |
| Self-employed | Other (tell what) _____ |

2. List all full-time jobs you have held since graduation. List your current job first, then list the jobs in order back to your first job following graduation. If there is insufficient space, please use the back of the page.

Job Title	Type of work actually done	No. of months

3. Draw a circle around the number which most clearly shows how you generally feel about your present job.

- | | | | | | | | | |
|---------------|---|---|---|---|---|--------------------------------------|--------------------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| I hate my job | There are some things I like & some things I dislike about my job | | | Job is all right. I can take it or leave it | | Generally well satisfied with my job | Very pleased with my job | |

4. Circle the number that shows how you feel about the type of work you are now doing.

- | | | | | | | | | |
|--------------|---|---|------------|---|---|-------|---|---|
| 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Enthusiastic | | | Interested | | | Bored | | |

5. Circle the number that shows the type of special training that is required to do your job.

- | | | | | | | | | |
|---------------|---------------------|---|---|---------------------|----------------------------|---|------------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| No experience | Past-job experience | | | On the job training | Vocational-school training | | Formal education | |

6. What do you feel your opportunities are for advancement on your present job? (circle one number).

- | | | | | | | | | |
|-----------|------|---|----------|---|------|---|------|---|
| 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Excellent | Good | | Adequate | | Fair | | Poor | |

7. What are the future employment opportunities for your present occupation? (circle one number).

- | | | | | | | | | |
|---------------------------------|----------------------------------|---|------------------------------|---|----------------------------------|---|---------------------------------|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Large decrease in opportunities | Slight decrease in opportunities | | Same number of opportunities | | Slight increase in opportunities | | Large increase in opportunities | |

8. Circle the number that shows how much responsibility you would like to have on your job.

9	8	7	6	5	4	3	2	1
Like to make most of the decisions		Like to make many of the decisions		Like to make half the decisions		Like to make a few decisions		Don't like to make decisions

9. Circle the number that shows how you generally feel about your employers, bosses and supervisors on the type of job you now hold.

1	2	3	4	5	6	7	8	9
Very dis- satisfied		Dissatisfied		They are all right		Well- satisfied		Very well satisfied

10. Circle the number that shows how you feel about changing to another job.

9	8	7	6	5	4	3	2	1
Would not change jobs		Would change if job was better		Possibly change		Like to change		Gladly change

11. Circle the number that shows how you feel your present abilities compare with fellow employees or colleagues.

1	2	3	4	5	6	7	8	9
Their abilities are less than my abilities				Their abilities are equal to mine				Their abilities are better than my abilities

12. Circle the category that best represents your average monthly salary before taxes. (This question is necessary to get the total picture. You are reminded that your answers are strictly confidential and all questionnaires will be destroyed as soon as the study is completed.)

\$240 or less	\$392 to \$477
\$241 to \$336	\$478 to \$584
\$337 to \$391	\$585 or more

13. Are you the highest wage earner in your immediate family?

Yes No

14. Since graduation, how many months have you NOT been on the job, in military service, or in school.

15. Since you left high school, have you been unable to work because of illness or injury?

Yes No

16. If you attended college before entering full-time employment, circle the college class you were in when you left school.

Freshman Sophomore Junior Senior Graduate level

17. If you have been or are now enrolled in a vocational program, place an "X" in front of the category that applies to you.

_____ Apprenticeship

_____ Business training

_____ Vocational education (examples: cosmetology, radio, practical nursing, etc.)

_____ Specialized training in military service (tell what) _____

18. If you started college or vocational training; did you complete the program?

Yes

No

19. If you did not complete the program; do you plan to complete it?

Yes

No

Tell the reason for your decision

20. What job do you think you will be doing in 1975?

21. What job would you like to be doing in 1975?

22. If you were in high school again, is there any help concerning occupations you would like to have received.

23. Is there any help concerning occupations you would like to have at the present time?

If you have no objection to being identified, and would like to have a summary of the results please sign your name. You are again reminded that all information will be considered completely confidential.
