AN ABSTRACT OF THE THESIS OF

JOE H. GHAFFARI for the degree of DOCTOR OF EDUCATION
in EDUCATION presented on December 8, 1976

Title: AN ANALYSIS OF ATTITUDES TOWARD CAREER EDUCATION

Abstract approved: Redacted for Privacy

Joseph F. Hlebichuk

The Purpose of the Study

The overall purposes of this study were: (1) to identify and analyze the attitudes of the school board members, vocational teachers, non-vocational teachers, school administrators and career education administrators toward career education; (2) to identify and analyze the attitudes of the above five personnel groups toward career education, on the basis of the size of the school district they represent. Three sizes of school districts were represented in the study: small, medium and large.

The specific objectives of the study were to identify and analyze: (1) the attitudes of school board members toward career education; (2) the attitudes of the vocational teachers in grades 11-12 toward career education; (3) the attitudes of the non-vocational teachers, school administrators and the career education administrators in grades K-12, toward career education; (4) the attitudes of
the above five personnel groups toward career education, as they represent small, medium and large school districts; (5) the interaction among the five personnel groups, the size of the school district they represent and attitudes toward career education.

Procedures

Construction of the research instrument was accomplished through an extensive review of the literature, especially the studies using the survey research technique in measurement of attitudes. A jury panel of Oregon educators studied and finalized the research instrument. The final survey questionnaire, containing 43 statements, was mailed to 240 randomly selected respondents. A five-point Likert-type scale was used to gather the data.

Six large, 12 medium and 25 small school districts were randomly selected to participate in the study. The participants were selected randomly from the above selected school districts. One hundred and fifty returned survey instruments were needed to complete the study. Each personnel group was represented by 30 study participants: 10 from small, 10 representing medium and 10 from large school districts.

The F statistic was used to analyze contrasts among the mean scores for each statement with the .05 level of significance being used to determine differences existing among the personnel groups.
and the three school district sizes. A test of Least Significant Difference was used to determine where significant differences existed between means of statements which were rejected in the analysis of variance test.

**Selected Findings and Conclusions**

The two-way analysis of variance test indicated that the study participants representing the five personnel groups and the three school district sizes, were alike in their responses to statements contained in the research instrument, but significant differences did occur in 3 of the 43 statements. The rejection of the null hypotheses on the three statements by either the personnel groups or the school district respondents resulted in the expression of the following attitudes: (1) school district respondents did not view student organizations as a viable part of the career education concept; (2) the personnel groups viewed career education as another addition to the curricula; and (3) the personnel groups did not feel that classroom teachers are receptive to the infusion of career education into their existing program of studies.

Based on mean scores, both the personnel groups and the school district respondents supported work experience, career guidance, career exploration and the preparatory role of career education for the world of work. The above populations, while supporting the major
components of the career education concept, expressed negative attitudes toward the effects of career education on the quality of education and viewed it as a frill.
An Analysis of Attitudes Toward Career Education

by

Joe H. Ghaffari

A THESIS

submitted to

Oregon State University

in partial fulfillment of the requirements for the degree of

Doctor of Education

Completed December 1976

Commencement June 1977
APPROVED:

Redacted for Privacy

Associate Professor of Education
in charge of major

Redacted for Privacy

Dean of School of Education

Redacted for Privacy

Dean of Graduate School

Date thesis is presented December 8, 1976

Typed by Clover Redfern for Joe H. Ghaffari
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td></td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>1</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>3</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>4</td>
</tr>
<tr>
<td>Objectives of the Study</td>
<td>5</td>
</tr>
<tr>
<td>Rationale for the Study</td>
<td>6</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>6</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>8</td>
</tr>
<tr>
<td>II. RELATED LITERATURE</td>
<td></td>
</tr>
<tr>
<td>Theory of Attitudes</td>
<td>10</td>
</tr>
<tr>
<td>Theory of Attitude Measurement</td>
<td>11</td>
</tr>
<tr>
<td>The Attitudes of Educators Toward Career Education</td>
<td>13</td>
</tr>
<tr>
<td>The Attitudes of the National Association of State Directors of Vocational Education Toward Career Education</td>
<td>17</td>
</tr>
<tr>
<td>United State Office of Education's Attitudes Toward Career Education</td>
<td>25</td>
</tr>
<tr>
<td>Findings of Other Studies on Attitudes Toward Career Education</td>
<td>26</td>
</tr>
<tr>
<td>Summary of the Findings of Other Studies on Attitudes Toward Career Education</td>
<td>28</td>
</tr>
<tr>
<td>III. DESIGN OF THE STUDY</td>
<td></td>
</tr>
<tr>
<td>Development of the Research Instrument</td>
<td>36</td>
</tr>
<tr>
<td>Selection of the Sample</td>
<td>38</td>
</tr>
<tr>
<td>Collection and Treatment of Data</td>
<td>40</td>
</tr>
<tr>
<td>IV. PRESENTATIONS OF THE FINDINGS</td>
<td></td>
</tr>
<tr>
<td>Findings Related to the Rejected Items of the Research Instrument</td>
<td>42</td>
</tr>
<tr>
<td>Personnel Groups and School Districts Mean Scores on Items of the Research Instrument, Which Both Groups Were in Agreement</td>
<td>46</td>
</tr>
<tr>
<td>Personnel Groups and School Districts Mean Scores on Items of the Research Instrument, Which Both Groups Expressed a Neutral View</td>
<td>49</td>
</tr>
<tr>
<td>Mean Scores of the Personnel Groups and the School Districts on Statements with a Negative Value</td>
<td>51</td>
</tr>
</tbody>
</table>
### Mean Scores of the Personnel Groups and the School Districts on Items of the Research Instrument, Which the Groups Have not Taken a Similar Stand

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Scores of Each Personnel Group Representing Small, Medium and Large School Districts</td>
<td>53</td>
</tr>
<tr>
<td>The Study Participants, Representing the Personnel Groups and the School District Sizes and Their Attitudes on the Statements of the Research Instrument, Expressed in Percentages</td>
<td>57</td>
</tr>
<tr>
<td>The Personnel Groups Attitudes on the Statements of the Research Instrument Expressed in Percentages</td>
<td>58</td>
</tr>
</tbody>
</table>

### V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Purpose</td>
<td>61</td>
</tr>
<tr>
<td>Procedures</td>
<td>61</td>
</tr>
<tr>
<td>Analysis of Data</td>
<td>62</td>
</tr>
<tr>
<td>Conclusions</td>
<td>63</td>
</tr>
<tr>
<td>Suggestions for Further Study</td>
<td>64</td>
</tr>
<tr>
<td>Implications</td>
<td>66</td>
</tr>
<tr>
<td>Implications</td>
<td>67</td>
</tr>
</tbody>
</table>

### BIBLIOGRAPHY

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPENDICES</td>
<td>69</td>
</tr>
<tr>
<td>Appendix A: Studies Using Attitudinal Instruments to Measure Attitudes Toward Career Education</td>
<td>74</td>
</tr>
<tr>
<td>Appendix B: Jury Panel of Educators Involved in the Development of the Research Instrument for the Study</td>
<td>76</td>
</tr>
<tr>
<td>Appendix C: Questionnaire</td>
<td>78</td>
</tr>
<tr>
<td>Appendix D: List of Randomly Selected School Districts Used in the Study</td>
<td>84</td>
</tr>
<tr>
<td>Appendix E: Cover Letter for Questionnaire</td>
<td>86</td>
</tr>
<tr>
<td>Appendix F: Follow Up Letter for Questionnaire</td>
<td>88</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table                                                                 Page
1. Items of the research instrument for which the hypotheses were rejected. 48
2. Items of the research instrument which all five personnel types and the three school district sizes agreed with. 50
3. Items of the research instrument on which all five personnel types and school district sizes expressed a neutral position. 52
4. The personnel groups and the school districts mean scores on the items of the research instrument with a negative value. 52
5. The mean scores of the personnel groups and the school districts on items of the research instrument which they did not take a similar stand. 54
6. Mean scores for each personnel group, representing the small, medium, and large school districts. 55
7. The study participants representing the personnel group and the three school district sizes and their attitudes on the statements of the research instrument, expressed in percentages. 59
8. The personnel groups attitudes on the statements of the research instrument, expressed in percentages. 59
ACKNOWLEDGEMENTS

The writer wishes to express his gratitude for the assistance and cooperation of the study participants who have made the completion of this study possible.

Special appreciation is due to Dr. Joseph Hlebichuk, for his interest, direction, advice, assistance and encouragement, in serving as the chairman of the author's doctoral committee. The writer is also indebted to Mr. Leno Christenson, Dr. Forrest Gathercoal, Dr. Robert McCain and Dr. Gene Craven for their advice and assistance while serving on the doctoral committee.

Special thanks are extended to Dr. Wayne Courtney for his assistance with the statistical aspect of the study.

My special gratitude goes to my parents Maryam and Abolfazel, whose support, encouragement and love for excellence has made the difference in my life.

Most importantly, I would like to extend my gratitude to my wife, Carol, and children, Shaundiz and Camron, for their patience, encouragement, support, personal sacrifice and love.
AN ANALYSIS OF ATTITUDES TOWARD CAREER EDUCATION

I. INTRODUCTION

The educational institutions in the United States have been given the responsibility of serving the educational needs of the public. The nature, quality, and the attitudes of the citizenry toward the services of education have varied over the span of time. The National Advisory Council on Vocational Education (1974) reports as recently as 1966, that the Harris poll showed "sixty-one percent of the people expressed a great deal of confidence in education's leadership. Since then, that figure has fallen to an alarming thirty-three percent and it is still falling" (p. 1).

Education's answer to the delivery of the services that the public needs, has been partially via general education at the public school and higher education at the post secondary level. However, the above channels and their methods have not met the needs of all the constituents that education serves.

The educational systems' inability to serve the society's need effectively has necessitated the need for an approach in education, whereby, education is more responsive, and serves the needs of all the segments in the society. This new approach has been referred to as career education. Kenneth Hoyt (1974), in describing the Department of Health, Education and Welfare's policy on career education,
states that career education represents a response to a call for educational reform. This call has arisen from a variety of sources, including students, parents, the business-industry-labor community, adults, minorities, and the disadvantaged, who have voiced dissatisfaction with American education as it currently exists (p. 5). The importance of career education as an instrument in meeting the demands of society on education has been highlighted in a Presidential Commission report (1972) on school finance which states:

... the commission recommends that career education be given priority and status at least equal to that now accorded to college preparation and that federal, state and local government and their education agencies to take policy and financial steps in that direction (p. 1).

The United States Office of Education's (Hoyt, 1974) definition of career education is "the totality of experiences through which one learns about and prepares to engage in work as part of her or his way of living" (p. 5). In Oregon (State Department of Education, 1974), career education "is an integral part of the educational program, and embraces the concept that each individual must learn to function effectively in six life roles: Learner, individual, producer, citizen, consumer, and family member" (p. 1).

If the restoration of public confidence in education were to be achieved, and if career education were the vehicle by which to achieve this goal, then, an understanding of career education and a positive view toward it is a must.
Statement of the Problem

A thorough understanding, a commitment and a positive attitude toward career education on the part of the educators is a must, if the objectives of career education were to be achieved successfully.

Career education in the past several years has received a great deal of attention nationally. In the beginning, due to the reluctance at the national level to define career education, there was a wide range of definitions on what career education is and what it set out to accomplish. Despite the fact that definitions of career education have since been put forth at the federal and state level, variance of opinions and attitudes on career education and its role in the American system of education still exists.

The lack of unanimity on career education, while it could be partially due to lack of understanding and confusion on exactly what career education is, could also be due to a sincere opposition in certain educational circles to what career education proposes to do.

Burton (1974) states that the absence of a positive attitude toward career education influences its effectiveness and potential for service. "For career education to progress it must be viewed favorably by those who will be most responsible for its implementation: the teacher, as well as administrators and board members" (p. 1).

Since career education encompasses all types of disciplines, the
negative and positive attitudes that may exist toward career education are not localized and limited to a particular group or discipline. It is clearly obvious that the existence of negative attitudes toward career education would not facilitate its implementation. Smith (1974) indicates that:

In order to conduct an effective career education program, it is imperative that teachers favor the concept of career education. Therefore, teacher attitudes must be determined so that efforts can be made to improve attitudes where necessary for effective program implementation (p. 4).

The problem is a lack of substantiated knowledge on attitudes toward career education among the educators, whose favorable attitudes are essential to the successful integration of the career education concept into education.

Hypotheses

This study will test the following null hypotheses:

**H**₁: There is no significant difference among the mean score of the attitudes of the five personnel types: school administrators, school board members, career education administrators, vocational teachers, and non-vocational teachers, toward career education.

**H**₂: There is no significant difference among the mean scores of the groups representing small, medium, and large school districts.
$H_3$: There is no significant difference among the mean scores of the attitudes of school administrators in small, medium, and large school districts.

$H_4$: There is no significant difference among the mean scores of the attitudes of vocational teachers in small, medium, and large school districts.

$H_5$: There is no significant difference among the mean scores of the attitudes of non-vocational teachers in small, medium, and large school districts.

$H_6$: There is no significant difference among the mean scores of the attitudes of career education administrators in small, medium, and large school districts.

$H_7$: There is no significant difference among the mean scores of the attitudes of school board members in small, medium, and large school districts.

Purpose of the Study

The overall purpose of this study was to identify and analyze the attitudes of vocational and non-vocational teachers, school administrators, career education personnel, and school board members in Oregon, toward career education. This study also identified and analyzed the attitudes of those representing small, medium, and large school districts in Oregon toward career education.
Objectives of the Study

This study was designed to identify and analyze the following:

1. The attitudes of the vocational teachers in grades 11-12 in Oregon, toward career education.

2. The attitudes of the non-vocational teachers in grades K-12 in Oregon, toward career education.

3. The attitudes of the school board members in Oregon, toward career education.

4. The attitudes of school administrators in grades K-12 in Oregon, toward career education.

5. The attitudes of the career education administrators in grades K-12 in Oregon, toward career education.

6. The attitudes of the sample groups, representing small, medium, and large school districts in Oregon, toward career education.

7. The interaction, if any, between the five groups of educators' attitudes toward career education and the size of the school districts they represent.

Rational for the Study

The Oregon Board of Education (Banner, et al., 1975) has taken three significant actions concerning career education. These are:
1. The adoption of a request in May, 1970, for local schools to submit a long range plan of career education (p. 1).

2. The incorporation into the Administrative Rules for Oregon Education (22-240) the requirement for local school districts to provide certain minimum graduation requirements including one credit of career education (p. 1).

3. The adoption, on February 8, 1974, of six new goals for elementary and secondary education. One of these six goals is that of producer. This goal supports and defines career education as a part of total education in Oregon (p. 1).

The local education agencies are required to integrate career education into their total curricula, on the basis of the actions taken by the Oregon Board of Education. However, the mere existence of career education programs at the local level is not indicative of the quality of the programs and the commitment of the local educational agency to career education.

A positive attitude toward career education on the part of the educators and those involved in education is a prerequisite to the growth and success of the career education concept. Conley (1973) states:

... the development of quality career education programs will to a great extent, be dependent upon the attitudes of those involved in curriculum development at the district level. Of particular importance will be the attitudes displayed by superintendents, directors of instruction, school principals, and to a lesser extent, school board presidents (p. 3).
In a presentation by the Nevada Occupational Research Coordinating unit (The National Association of State Directors of Vocational Education, 1971), the role of school administration in moving career education from its present position to one of full integration into the existing curricula was emphasized. The presentation emphasized that the attitudes held by the school administrators and the board of education are a major determinant in effecting the overall implementation of the integrated program of studies (p. 3).

A knowledge of the attitudes of those responsible for implementation of career education would enable those in teacher education, personnel development and administrators of state and local educational agencies, to deal better with the infusion, and the implementation of career education in the total instructional programs. Thus, the information obtained in this study may be useful to teachers, teacher educators, directors of career education, administrators, people responsible for personnel development, and state and local boards of education.

**Definition of Terms**

**Vocational Education Teacher**

In this study, vocational education teacher refers to those in grades 11 and 12, teaching the career clusters developed by the
Oregon State Department of Education. The career clusters identified by the State Department of Education include: agriculture, metals, building construction, industrial mechanics, marketing, clerical, secretarial, accounting, health occupations, forest products, graphic arts, social services, food services and electricity.

**School Administrator**

In this study, the school administrator refers to elementary, mid-school, junior high school and senior high school principals. It also includes the school district superintendents.

**Career Education Administrator**

In this study, the career education administrator refers to those who are responsible for the implementation and administration of career education programs in grades K-12.

**School Board Members**

In this study, the school board members refers to those who have been elected by a local constituency and recognized by the state as the official policy making body on educational matters at the local level.
Analysis of Variance

Borg (1963) defines analysis of variance as "a statistical technique that makes it possible to divide the differences (variance) that we obtain in our experimental data into parts and assign each part to its correct source" (p. 141).

Fixed Design

Courtney and Segwick define fixed design as a model "... in which the experimenter arbitrarily sets or fixes the levels of the factors which he wishes to study" (p. 2).

Limitations of the Study

1. Of the six life roles which embrace the career education concept, as identified by the State of Oregon, the research instrument in this study emphasizes the producer's role.
2. This study presumes that the respondents to the research instrument would freely indicate their attitude toward career education.
3. Study participants represent only the state of Oregon.
II. RELATED LITERATURE

The purpose of this chapter is to review theories of attitude, measurement of attitude, and attitudes toward career education, and finally report the findings of the available studies dealing with the identification and analysis of attitudes toward career education.

Theory of Attitudes

Attitude has been the subject of numerous studies, and varied definitions of attitude have been put forth by the experts in the field. Alport (1967) considers attitude as:

A mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related (p. 8).

Thurstone (1929) views attitude as "... the sum total of man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats and convictions about any specific topic" (p. 216). Krech, Crutchfield and Ballachey (1962), in their definition of attitude, stated "As the individual develops his cognitions, feelings and action tendencies with respect to the various objects in his world become organized into enduring systems called attitude" (p. 139). Sherif, Sherif and Nebergall (1965), in their reference to attitude, state that "... attitudes refer to standards the individual upholds and cherishes about objects, issues, persons, groups, or institutions"
Additionally, Sherif and Sherif (1967) emphasize that attitudes are not temporary states but are enduring once they are formed. As a person experiences a rewarding state of affairs in association with attitude objects, his affect toward the object will become more favorable. Conversely, if the experience in punishing, the person will change his affect in a negative direction (p. 68).

Zimbardo and Ebbesen (1970) analyze the traditional way in which attitudes have been formed.

Attitudes have generally been regarded as either mental readiness or implicit predispositions which exert some general and consistent influence on a fairly large class of evaluative responses. These responses are generally directed toward some object, person, or group. In addition, attitudes are seen as enduring predispositions, but ones which are learned rather than innate. Thus, even though attitudes are not momentarily transient, they are susceptible to change (p. 6).

Oppenheim (1969) groups attitudes into three categories:

1. cognitive (beliefs);
2. emotional (feelings);
3. action-taking (behavior). There is ample evidence of interrelationship among these three components. However, these components may differ in valence and multiplexity. A given attitude may incorporate highly favorable beliefs about its object, mildly favorable feelings, and some slight tendency to take favorable action with respect to the object. The available evidence indicates a trend for consistency among these components and their valence and complexity.
Theory of Attitude Measurement

Alport (1967) believes that the measurement of attitude is indirect as are most psychological measurements. Attitudes are measured on the basis of inferences drawn from the responses of individuals toward an object, either in terms of verbal statements of feeling, belief and disposition or overt actions (p. 6).

The major methods of attitude measurement are Thurstone's method of equal-appearing intervals, Guttman's scalogram, Osgood's semantic differential and Likert's method of summated ratings. Each of the techniques makes different assumptions concerning the test items and the kind of information provided.

According to Burton (1974) the first major method of attitude measurement was developed by Thurstone. He assumed that statements of opinion could be obtained about an issue and these could be ranked according to a dimension of expressed favorableness--unfavorableness toward the particular issue. This allowed judgement about the degree of discrepancy between different people's attitudes. Thurstone's scale has about 20 statements of opinion about an issue. An individual's attitude is measured by asking him to check statements with which he agrees. The value of each statement is measured by its position on the continuum and a given numerical value. The numerical value between each two statements is approximately equal (p. 20).
Another scaling technique of attitude is that of Guttman, which has been elaborated on by others (Dotson, Summers, 1970). This technique is based on the assumption that a single trait can be measured by a set of statements ordered along a continuum of difficulty or acceptance. The statements range from easy to accept to difficult to accept. The acceptance of one item implies the acceptance of those of lesser difficulty. Based on this, an individual's attitude can be predicted towards other statements on the basis of knowing the most difficult item he will accept (p. 56).

A third technique of attitude measurement was developed by Osgood (1970), and it is based on the meaning that one gives to a word or concept. The basic assumption of Osgood's technique is a hypothetical semantic space in which the meaning of any word or concept can be represented as a particular point. The individual measures a particular concept on a set of semantic scales defined by verbal opposites, with the middle being neutral (p. 56).

Likert's (1967) scale of attitude measurement is composed of opinion statements about an issue. It is equally reliable with Thurstone's and less difficult to construct. The following steps represent the Likert method:

1. The collection of a bank of statements, which in the researcher's view relate to the attitude object in question.
2. The administration of the statements to a group of subjects who indicate in each statement whether they strongly agree, agree, have no opinion, disagree, or strongly disagree.

3. The determination of each respondent's total score by summing all his responses to all the items. The scale is reversed in unfavorable items.

4. The carrying out of an item analysis to select the most discriminating items.

Item analysis is applied to determine if the numerical values of the item alternatives are properly assigned and if the statements are "differentiating". The item analysis calls for calculating the correlation coefficient for each statement with the battery of statements. A negative correlation coefficient indicates that the numerical values are not assigned properly and they should be reversed. A zero or very low correlation indicates that the statement fails to measure that which the rest of the statements measure. These statements do not differentiate and are irrelevant or ambiguous. In summary, item analysis indicates whether those persons who fall toward one end of the attitude continuum on the battery do so on the particular statement. The size of the correlation coefficient required between a particular item and the battery of items is the function of the type of study undertaken. A general survey of teachers of diverse background
will produce a higher correlation coefficient than a more specialized study (p. 93).

Reliability and validity are important considerations in developing attitude scales (Green, 1967). The sampling of items, the circumstances of a particular administration and the characteristics of the respondents may introduce inconsistency (error) into the measurement. An estimation of the magnitude of this error is obtained by a reliability coefficient, which is the correlation between an individual's performance (score) on two sets of scales. The reliability coefficient indicates the proportion of persons who would change their classification on a second administration of the scale (p. 725).

Brown (1970) states that the consistency of measurement also encompasses the concepts of homogeneity and unidimensionality. Homogeneity is defined in terms of consistency of performance over all items on a scale. The concept of unidimensionality is defined in terms of the degree to which the scale measures one variable (object) as opposed to a combination of variables. If the scores on the various items are positively intercorrelated, the scale is said to be homogeneous. Kuder-Richardson formulas are widely used to obtain indices of homogeneity (p. 250).

Brown (1970) indicates that validity is concerned with (1) what the scale measures and (2) how well it measures. One frequent use of psychological measures is to predict an individual's future attitude
or behavior on some significant independent variable. An index of this predictive accuracy is often referred to as criterion-related validity. In regard to criterion-related validity, the major concern is to select items that predict the criterion. The content of the scale is irrelevant for this type validity (p. 252).

Content validity is concerned with how well the content of the scale samples the object under investigation (Brown, 1970). The scale must represent a well defined universe of attitudes and behaviors in order to have content validity. Evaluation of the validity of the scale is made in terms of the adequacy of sampling. "Because no quantitative index of sampling adequacy is available, evaluation will necessarily be a rational, judgmental process" (p. 253).

The Attitudes of Educators Toward Career Education

Keith Goldhammer (Essays on Career Education, 1973) refers to career education as a New Paradigm.

It is argued that career education constitutes a new vitalizing thrust in education. There are, of course, those who will say that it is just another passing fancy and if we do not pay too much attention to it, it will go away and leave us undisturbed. The evidence mounts daily that this is not the general reaction. The increasing public and legislative reaction to career education is one of hope that a new paradigm for education operations has finally been found which will not only provide a basic return consistent with the anticipated human and financial inputs, but a relevance for youth which will help them find their social identifications and secure a sense of mission and destiny as participating members of society (p. xi).
A Relevant Education is the way Dr. Gysbers (1972) views career education. He states that he would add to the regular educational program from kindergarten through adult years, "knowledge of self, career planning, knowledge of work and leisure," this "total" human development program he would call career education. Such an approach, Dr. Gysbers believes, would overcome the deficiencies of traditional education and replace it with a more open and relevant education in which the learner is fully involved (p. 2). Arthur Hansen (1973), of the Michigan Department of Education, explains why the state of Michigan needs to incorporate career education into the educational system:

For many Michigan youth, the public school system represents a bewildering succession of activities without a goal . . . The academic curriculum of many schools in Michigan is inadequate for about sixty percent of our high school youth whose next step is work. One way of rendering school experiences more relevant . . . is to organize the school curriculum around a career development theme (p. 8).

Educational philosopher Thomas F. Green (1973), discusses career education in terms of Preparation for Career and Employment. He believes that education for careers is more important than education for employment, since a person's career may be quite different from his job and much more important to his happiness and satisfaction in life. He believes having a career is different from having employment, even steady employment over a lifetime. There is no
reason why anyone should find his career in or through his mode of employment.

Career education should never be confused with vocational education in so far as that kind of question is directed toward training for jobs or for employment. Careers most certainly will not develop without employment, but neither should education for careers ever be confused with education for employment. They are therefore two educational tasks that need to be distinguished - education for work or careers, and education for jobs or employment (p. 206-218).

Edwin L. Hess (1972), Professor of Education, views career education as a Unifying Entity, and considers the concept neither premature nor impossible (p. 180). Louis J. Keller (1972) points out that regardless of how long individuals stay in a college-sheltered environment, they eventually must face the realities of the world of work.

The educational system of the 1970's must find ways to develop students into productive, independent, rational persons who are productively employed and use their leisure time not only for fun but also for public service and self-actualization. The model by which transition from an educational system subdivided into three domains (academic, vocational and general) toward a more realistic human approach would be the sincere consideration of restructuring the curriculum around the concept of career development education (p. 185).

Keith Goldhammer (1972) considers career education as a provision for planned choices. He declares erroneous the charge that career education will lock students into their station in life.
The great strength of Career Education lies in the degree in which the future is open-ended for each student. Every effort should be made to help each student realistically determine how he can maximize his potentialities to achieve the highest career level consistent with his aspirations. Career education has the objective of helping him make his own decisions of how he fits in (p. 195).

It is Goldhammer's (1972) hope that this new educational plan will make provision for the past rhetoric of "democratic educational opportunities" to become the realities of the educational system (p. 196).

John W. Letson (1973), Superintendent of Atlantic Public Schools, advocates career education as a sound alternative to traditional public schools. He points out that the aim of career education is not to accomplish an early career choice.

The present emphasis on Career Education is based on the belief that through the utilization of career interest pupils can be motivated to higher academic achievement. At the same time, it is hoped that Career Education will accomplish the important purpose of helping students understand the opportunities that exist in the world of work. They should be able to do some realistic thinking about their own place in the world and how they can move step by step to accomplish their own goals. That is what Career Education is all about. How effectively we move toward the achievement of these purposes will be related directly to the skill we demonstrate in translating the concept into action (p. 98).

Dale Parnell (1973), Superintendent of Public Instruction in Oregon, calls for a totally integrated educational concept to meet the universal needs of youth (p. 106). The Oregon Way, as the new
approach to secondary education in 1969, was based on two assumptions:

1. Secondary schools should be preparatory institutions for all students (those entering college and those entering careers requiring less than a baccalaureate). 2. A secondary school preparatory program should tie the curriculum to the goals of the students in such a way that they are motivated while in school and also better equipped to choose from among many alternatives as they take that next step, whether it be on-the-job training, apprenticeship, community college, proprietary schools, or a four year college (p. 57).

After pursuing for years a devious path of trial and error, Stanley H. Cramer (1973) finally found himself living in a lifestyle that suited his tastes and in a position commensurate with his abilities and aptitudes. He feels it would be less traumatic and would result in less waste of individual time and energy if the process of vocational education and career development could be institutionalized. This would enable the youth to be guided,

... by accurate self-knowledge, not self-deception; by order, not chaos; by skills in decision making, not choice incompetence; by an understanding of occupational alternatives, not vocational illiteracy; and by a joy in the process, not frustration ... that goal seems worthwhile (p. 18).

Edward Zigler (1973), Professor of Psychology and Director of the Child Development Program at Yale University, considers career education as having potential to fill a gap in the lives of children and youth, and discusses it in terms of An Assurance for Continuity.

Children, he says, have become isolated from the world of work. Few
children have real awareness of what their parents' job entails, and
the schools provide little opportunity for children to see adults - other
than their teachers. Older children have few opportunities to partici-
pate in adult work, activities and responsibilities. The consequences
of segregating children from adults is that of depriving them of the
range of experience they need to build an adult identity and a positive
attitude toward work and independence (p. 257).

Associate Commissioner for Adult, Vocational and Technical
Education, Robert M. Worthington (1973), stated the thinking of the
United States Office of Education (USOE) regarding Career Education
in 1972, at a conference in Tokyo, when he said:

Career Education recognizes the critical decision points
when students must be prepared and equipped to decide
whether to pursue a job or further education or some
combination of both work and formal study. It is a life-
long systematic way of acquainting with the world of work
in their elementary and junior high school years and pre-
paring them in high school and in college to enter into and
advance in a career field of their own choosing . . .
Career Education embraces all occupations and profes-
sions and can include individuals of all ages whether in
or out of school (p. 430).

Dale Parnell (1973), Superintendent of Public Instruction in
Oregon, views career education as a Student Oriented approach to
education.

Career education is wholly student oriented. It uses knowl-
edge, values and skills as a means to the student's ends,
not as ends in themselves. In the career education curricu-
ulum, knowledge must be functionally related to the range of
life careers or roles in which the individual will
participate. In other words, it is education for survival in our contemporary society. That implies some rigorous demands and discipline, not just on and for students but on and for education. It does not mean that everything will be easier. It does mean that student motivation based on a ranked order of needs will be a major consideration (p. 106).

Thelma T. Daley (1973), a counselor, emphasizes the involvement of School and Community, working together in making career education work.

Career Education embraces the total development of youth. It enhances academic preparation. True career development accentuates the development of attitudes, understanding and self-awareness, as well as the development of job skills. Career development can not be taught in isolation. It involves many disciplines and forces; it is a total school concept. Career development can not be confined to mortar-sealed brickwalls; its boundaries are limitless. For career education to become a true reality, the school and community must join hands and cooperatively push forward so that youth -- all youth -- may come to know and develop themselves (p. 92).

A businessman in Portland, Oregon, Edwin H. Stanley (1973), believes that the most effective and economical method of educating for the world of work is to use resources already available in the community. He suggests that career education has the potential of bringing business and education together.

In the past, ... education has tended to be a mystical responsibility of the select few. Educators have tended to say, 'We will do only what we think needs to be done: Education has ignored the business world too, because business had not been vocal enough in expressing its needs or active enough in making its resources available.
Career education may offer a chance and a channel for some much-needed communication. In fact, this two-way street may be the real strength of career education (p. 188).

William J. Micheels (1973), University Professor, believes that career education requires An Involvement of All Levels of Career Education, and that institutions of higher learning not remain aloof from the career education movement and remain true to their historic commitment to education for careers (p. 149).

John F. Grede (1973), an experienced junior college president, a former university professor of higher education, and currently Vice Chancellor for Career and Manpower Programs for the City College of Chicago, questions not whether the role of higher education in career education will be included, that, he sees as predetermined, but what kind of model will prevail to influence the patterns of the system? Will the approach be the traditional career preparation as viewed by the colleges and universities, or will it be the community college conception? The first view is supported and shaped by higher education, particularly by the professional schools. The latter approach is moving in different directions and operating on different assumptions. It is much smaller and is aimed at the entire community of young and old, disadvantages and mainstream, minorities and majorities, rather than at the selective group of educationally talented youth.
The catalyst for a more comprehensive, coordinate, flexible, economical, prestigious, productive and unpublicized system of career education may be the community college. In keeping with its past history, the community colleges will take their role in stride (p. 126).

The Attitudes of the National Association of State Directors of Vocational Education Toward Career Education

The National Association of State Directors of Vocational Education (1971) adopted a position paper on career education which stated "... we believe, further, that the following characteristics are inherent and essential aspects of career education:"

1. Career education is not synonymous with vocational education but vocational education is a major part of career education.
2. Career education embraces rather than supplants public school educational programs.
3. Career education is an integral part of the total public school enterprise.
4. Career education involves all students and all educators.
5. Career education involves extensive orientation and exploration of occupational opportunities.
6. Career education emphasizes individual instruction and student determination.
7. Career education is a continuum that begins at kindergarten and extends throughout employment.

8. Career education contributes to students incentive and aspirations.

9. Career education includes specific preparation for occupations.


11. Career education promotes wholesome attitudes toward all useful work.

12. Career education permits each student to realistically assess personal attributes as a part of setting life goals.

13. Career education provides a means of articulation from grade to grade and level to level (p. 8).

**United State Office of Education's Attitudes Toward Career Education**

In a United States Office of Education policy paper, Hoyt (1974) identifies the following as learner outcomes for career education:

1. Competent in the basic academic skills required for adaptability in our rapidly changing society.

2. Equipped with good work habits.

3. Capable of choosing a personally meaningful set of work values that lead them to possess a desire to work.

4. Equipped with career decision making skills, job hunting skills, and job getting skills.
5. Equipped with vocational skills at a level that will allow them to gain entry into and attain a degree of success in the occupational society.

6. Equipped with career decisions that they have made based on the widest possible set of data concerning themselves and their educational-vocational opportunities.

7. Aware of means available to them for continuing and recurrent education once they have left the formal system of schooling.

8. Successful in being placed in a paid occupation, in further education, or in a vocation that is consistent with their current career education.

9. Successful in incorporating work values into their total personal value structure in such a way that they are able to choose what, for them, is a desirable lifestyle (p. 14-15).

The above learner outcome goals are intended to be applied to persons leaving the formal education system for the world of work. Thus, for some persons, these goals become applicable upon leaving secondary school. For others, it will be when they have left post high school occupational education programs. For still others, these goals need not be applied until they have left a college or university setting. Therefore, the applicability of these learner outcomes will differ from individual to individual as well as from one level of education to another. This is consistent with the developmental nature, and the basic assumptions of individual differences, inherent in the concept of career education (p. 16).
Findings of Other Studies on Attitudes Toward Career Education

A study by Howard Conley (1973) attempted to identify, assess and compare the attitudes of school administrators and board of education presidents relative to career education in New Mexico.

1. Will the attitudes of superintendents, directors of instruction, elementary, junior high school and senior high school principals, and the school board chairmen toward career education differ significantly?

The mean score of all groups indicated slightly positive attitudes toward career education. School administrators showed slightly more positive attitudes than did the school board chairmen. There was a significant difference in attitudes between school board chairmen and the other five groups (p. 89).

While no significant differences were established, the mean scores of the superintendents would seem to indicate that superintendents from the large school districts had a more positive attitude toward career education than the superintendents from medium and small school districts (p. 89).

The results for the directors of instruction and the school principals were similar to that of the superintendents, in that they viewed career education favorably and this was more true of those from the large and medium size districts compared to the small districts (p. 88).
School board chairmen scored the lowest means of the six groups in relation to attitudes toward career education. School board chairmen from the large districts scored the highest and those from the small districts the lowest (p. 88).

The respondents ranked funding for career education behind teacher's salaries and the existing general curriculum in regard to priority should additional funding be available. Student activities were ranked lowest in terms of priority for additional funding (p. 90).

2. "Will the respondents' attitude toward career education differ significantly in relation to age and number of years of work experience outside the field of education?"

There was significant negative correlation between the years of work experience outside the field of education the respondent had and the attitude he displayed toward career education (p. 91).

3. "Will there be a significant difference in the respondents' attitudes toward career education in relation to the type of undergraduate major obtained?"

An analysis of variance revealed no significant difference in attitudes toward career education relative to the undergraduate degree the respondents obtained. However, the results indicated a significant difference in attitudes between those respondents having a baccalaureate degree and those who did not. Those respondents not having a baccalaureate degree had a less positive attitude toward career education (p. 91).
Brook (1974) conducted a study to find out the attitudes and teaching behaviors of occupational orientation teachers in Mississippi. The study was aimed at measuring the "process" (quantity) of teaching behaviors of occupational orientation teachers with vocational education experience, rather than the "product" (quality) of teaching behaviors.

Some of the study's findings are as follow:

1. Teachers of occupational orientation in Mississippi, for the most part, strongly support the concept of "career education/occupational orientation" (p. 68).

2. Race, sex, age, years of experience teaching occupational orientation, hours of credit received in vocational guidance and amount of time spent teaching occupational orientation/career education, do not significantly contribute to the prediction of attitudes that occupational orientation teachers hold toward career education/occupational orientation (p. 68).

3. The extent that the teachers of occupational orientation are involved and participate in the following activities is a good predictor, and contributes significantly to determining of their attitudes toward career education/occupational orientation: (1) utilizing community resources in occupational orientation classes, (2) holding discussion with the guidance counselors concerning the type of materials that should be taught in the occupational orientation classes, (3) leading
classes in occupationally-related field trips, (4) soliciting the view of businessmen and industry people concerning what to teach in occupational orientation classes, (5) locating work experience stations for students, and (6) holding discussions with students concerning the relationship of school subjects to the world of work. However, the extent that teachers are involved in a single behavior is not a good predictor of their attitudes toward career education. "This means that the relationships that exist between teaching behaviors and attitudes are too complex to be explained in terms of a single behavior" (p. 69).

4. Younger teachers are less active in recruiting community resources for occupational orientation programs than the older teachers (p. 69).

5. Teachers who are involved teaching occupational orientation on a full-time basis are more active in involving other teachers in their program of instruction, than are teachers who are involved in occupational orientation only on a part time basis (p. 70).

6. Black occupational orientation teachers are more dedicated than white teachers in conveying to students the relationship of school subjects of the world of work (p. 70).

Smith (1974), in a study to determine the attitudes of teachers toward career education, administered a questionnaire to 81 teachers of four elementary schools in the city of Greeneville, and 81 teachers
of six elementary schools and one secondary school of Greeneville County, Tennessee.

City and county teachers were in complete agreement (100 percent) with the following statements:

Teachers should appreciate the values of many types of work.

Teachers should help students develop attitudes necessary for career advancement.

Teachers should help students develop the ability to get along with people.

Students should become familiar with many different careers (p. 8).

Both groups were in almost total agreement on these statements:

The school should use parents, employers, and community for sources of learning.

Teachers should relate instruction to career development.

Students should learn the values of work from kindergarten through high school.

Students should study their interests and abilities to determine their fitness for specific careers.

Students should have the opportunity to learn vocational skills.

Students should have the opportunity for work experience (p. 9).

Over 75 percent of both groups agreed that the schools should prepare students for career and provide them with the tools of decision making about careers. However, only 50 percent of city and county schools agreed that the school should place all graduates
in jobs or post-secondary institutions for additional career preparation (p. 9).

The city and county teachers showed differing attitudes toward a number of issues dealing with career education. One hundred percent of the city teachers expressed the feeling that the school should provide guidance and counseling for career development, 32 percent of the county teachers disagreed. City teachers demonstrated a more favorable attitude toward student follow-up after graduation; 82 percent were in strong agreement as opposed to 59 percent of the county group (p. 10).

Ninety-three percent of the city teachers favored work-related experience for teachers to increase understanding about careers. However, only 52 percent of the county teachers expressed a similar view (p. 10).

Three-fourths of the city group considered themselves responsible for career development and favored students having free choice to leave school and return later to complete their education. One-half of the county respondents disagreed with these statements (p. 10).

Burton (1974), in a study involving school board members, school administrators, vocational teachers and non-vocational teachers in Alabama, found general agreement in the following areas in respect to their attitudes toward career education:
1. Introduction of career education to schools does not lower the quality of education.

2. One function of a guidance program should be the placement of all those who leave the school.

3. Students at the elementary level should develop their self awareness early in their school program and their values, interests and aptitudes should be considered in making career choices.

4. Students prefer active involvement rather than passive learning activities.

5. On the question of whether career education is another addition to the curricula, the teachers responded affirmatively and the administrators negatively.

6. The vocational teachers responded more positively than non-vocational teachers to the statement that "... more students should be encouraged to enroll in courses which prepare them for employment".

7. A significant difference existed between the attitudes of vocational and non-vocational teachers on the statement "... the general education curriculum is the best all around preparation for entry into an occupation". It was concluded that each teacher group views his own area as the best preparation for occupational entry.

8. All groups were favorable toward vocational counseling as part of the school program.
9. Respondents' attitudes toward the statement "... the school guidance personnel tend to direct students toward college preparatory courses", indicated that the guidance personnel do not have a clear image as being impartial in their academic counseling effort.

10. All groups were in general agreement on the statement "... the public schools are continuing to turn out a large number of students who lack salable skills" (p. 114-118).

Ohanneson (1974) conducted a study to ascertain the opinions of California vocational, general and academic high school teachers toward career education. The study produced the following results:

1. "Vocational/Industrial Arts teachers' response to teacher/classroom career education practices was significantly higher than that of Academic/General teachers" (p. 18).

2. Vocational/Industrial Arts and Academic/General teachers' response did not differ significantly concerning the degree to which their school be, was capable of and actually was engaged in school/community career education practices.

3. Teachers agreed that they were not actually engaged in career education practices at the frequency which they should be or of which they were capable. There was a general agreement that the schools were failing to respond to the extensive need for school/community career education.
4. Greater support of career education was indicated by the Academic/General teachers with 4-20 years of non-teaching, part time work experience, than those with fewer years of experience.

5. Teachers with 4-20 years of non-teaching, full time work experience indicated generally greater support of career education than those who had fewer years of experience.

6. Substantially greater support of teacher-classroom career education practices was shown by the Academic/General teachers with prior information and experience with career education, compared to those who had none.

7. Number of years of teacher experiences, geographic location, population density, and sex of teachers had no appreciable effect on teacher opinions of career education (p. 20-22).

Summary of the Findings of Other Studies on Attitudes Toward Career Education

In all of the studies cited, career education was supported by the respondents in varying degrees. It was found, that factors such as the type of undergraduate degrees, race, sex, age and hours of credit received in vocational guidance, were not good predictors of attitudes toward career education.

Burton (1974) found agreement with the view that school continue to turn out a large number of students who lack salable skills. His
research also indicated that teachers view career education as another addition to the curricula.

Ohanneson (1974) found a direct relationship between the years of work experience outside education and positive attitudes toward career education. Conley (1973) found just the opposite. Ohanneson's research indicated that teachers agreed that they were not actually engaged in career education practices at the frequency which they should be or of which they were capable.
III. DESIGN OF THE STUDY

Development of the Research Instrument

The development of the research instrument began with an examination of other studies, using a survey instrument as the method of measuring attitudes toward career education. The ERIC search produced a list of studies conducted in other parts of the United States, dealing with measurement of attitudes toward career education (see Appendix A). A survey instrument was the tool used in measurement of attitudes toward career education in all of these studies.

The field tested survey instruments in the existing studies assisted a jury of Oregon educators in the development of an attitudinal instrument toward career education for the study. In order to make the instrument comprehensive and provide for the input of various educational bodies, representatives of the Oregon State Department of Education, Oregon State University, local educational agencies, and the Intermediate Education Districts were invited to serve on the jury panel (see Appendix B).

The research instrument was submitted to a group from the Gladstone School District, similar in make up to the population who responded to the final questionnaire. The group critiqued the instrument for clarity in the interpretation of meaning.
The jury panel of Oregon educators established the content validity of the survey instrument. In addition, each item of the research instrument was cross referenced with another study conducted by Ashlock (1974), identifying the descriptive factors of career education. Since each item of the research instrument appeared in other field tested studies, with established reliability, a separate reliability test was not conducted for the research instrument used in this study.

The research instrument, in its final form, consisted of 43 questions, representing the broad concept of career education (see Appendix C). The Likert-type scale was used to solicit the respondents views on career education. Kerlinger (1964) states that the Likert-type scale is a set of attitude items, all of which are considered approximately equal "attitude values", and to each of which the subjects respond with degrees of agreement or disagreement (intensity). The scores of the items of such a scale are summed, or summed and averaged, to yield an individual's attitude score. The purpose of the Likert-type scale (summated rating scale), as in all attitude scales, is to place an individual somewhere on an agreement continuum of the attitude in question (p. 484).

Kerlinger (1964) believes the summated rating scales (Likert-type scale) to be the most useful of the three major types of attitude scales: summed rating scales, equal appearing interval scales,
and cumulative. It is easier to develop, and yields the same results as the more laboriously constructed attitude scales (p. 487).

In order to obtain a greater degree of variance, a five-point Likert-type scale was utilized to solicit the respondents views on career education.

<table>
<thead>
<tr>
<th>Response Category</th>
<th>Assigned Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA = Strongly agree with the statement</td>
<td>5</td>
</tr>
<tr>
<td>A = Agree, but not strongly</td>
<td>4</td>
</tr>
<tr>
<td>N = Neutral toward the statement</td>
<td>3</td>
</tr>
<tr>
<td>D = Disagree, but not strongly</td>
<td>2</td>
</tr>
<tr>
<td>SD = Strongly disagree with the statement</td>
<td>1</td>
</tr>
</tbody>
</table>

Some of the statement in the research instrument, specifically statements 2, 6, 9, 15, 16, 19, 31, 33, 37, and 42, have a negative value. The assigned values for these statements were the opposite of the other statements in the survey instrument.

Selection of the Sample

Five distinct groups of educators were involved in the study. The groups consisted of vocational teachers, non-vocational teachers, local educational agency administrators, career education administrators, and school board members. The sample population, consisting of the above five groups, represented three school district
sizes: large, medium and small.

Each of the five groups included in the study was selected due to its involvement with career education. In order to study and determine if the size of the educational institution has any influence on the attitudes of its personnel toward career education, the respondents represented three different sizes of school districts.

The Oregon State Department of Education's practice of grouping the school districts into size categories, for its operational purposes, were followed in classification of the school districts in this study. Specifically, school districts with an average daily membership of 3,000 and over, were considered large; those districts with 1,000-2,999 average daily membership, were considered medium; and those districts with average daily membership of 999 or less, were considered small.

Utilizing the above guidelines in classifying school districts for size, and using the available data from the Oregon State Department of Education, there are 36 large school districts, 58 medium school districts, and 258 small school districts. A table of random numbers (Tate, 1965) was utilized to select the needed local educational agencies for the study (p. 328-329). Six large school districts, 12 medium school districts, and 25 small school districts were randomly selected, thus allowing every school district in the state and equal change to be involved in the study (see Appendix D).
The list of the personnel in the randomly selected schools was obtained by either contacting the local educational agencies, or the Oregon State Department of Education. The sample population was selected from the randomly selected school districts as follows:

<table>
<thead>
<tr>
<th>Area</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational Teachers</td>
<td>30</td>
</tr>
<tr>
<td>Non-Vocational</td>
<td>30</td>
</tr>
<tr>
<td>Local Educational Agencies Administrators</td>
<td>30</td>
</tr>
<tr>
<td>Career Education Administrators</td>
<td>30</td>
</tr>
<tr>
<td>Board of Directors of Local Educational Agencies</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>150</strong></td>
</tr>
</tbody>
</table>

**Collection and Treatment of Data**

The survey research technique was utilized to collect the data for the study. Kerlinger (1964) defines survey research as:

... that branch of social scientific investigation that studies large and small populations (or universe) by selecting and studying samples chosen from the populations to discover the relative incidence, distribution and interrelations of sociological and psychological variables (p. 393).

The research instrument, along with instructions for completion, was sent to 48 respondents in each of the five groups involved in the study. A total of 240 research instruments were mailed (see Appendix E). A total of 150 completed returned questionnaires, out of the 240 instruments mailed out, were needed for the study. The
groups involved in the study were comprised of vocational teachers, non-vocational teachers, school administrators, career education administrators, and school board members. The 48 respondents in each of the five groups comprised of 16 from large school districts, 16 from medium size school districts, and 16 from small school districts. Ten completed returned questionnaires from each group constituted the data for the group.

The first mailing resulted in all but three of the needed returns. Follow-up letters were sent to encourage further returns (see Appendix F). The overall rate of return for the instrument was 78 percent.

The collected data were committed to electronic data processing techniques for compiling and computer analysis of the survey items.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Type</td>
<td>4</td>
<td>A</td>
<td>A/4</td>
<td>( \text{MS}<em>{\text{PT}} / \text{MS}</em>{\text{Error}} )</td>
</tr>
<tr>
<td>School District Size</td>
<td>2</td>
<td>B</td>
<td>B/2</td>
<td>( \text{MS}<em>{\text{SD}} / \text{MS}</em>{\text{Error}} )</td>
</tr>
<tr>
<td>Personnel Type and School District Size Interaction</td>
<td>8</td>
<td>C</td>
<td>C/8</td>
<td>( \text{MS}<em>{\text{Int}} / \text{MS}</em>{\text{Error}} )</td>
</tr>
<tr>
<td>Error/Within</td>
<td>135</td>
<td>D</td>
<td>D/135</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>149</td>
<td>E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( \text{PT} = \text{Personnel Type.} \)
\( \text{SD} = \text{School District Size.} \)
\( \text{Int} = \text{Interaction.} \)
The study utilized a two-way analysis of variance, fixed design, and equal cell size matrix, to test the following hypotheses set forth in this study:

1. There is no significant difference among the mean scores of the attitudes of the five personnel types: school administrators, school board members, career education administrators, vocational teachers, and non-vocational teachers toward career education.

2. The size of the school districts, large, medium, and small, has no significance on the mean scores of attitudes of the five personnel types toward career education.

3. There is no significant interaction effect between the five personnel types and the size of the school district they represent.

Kerlinger (1964) states that in a two-way analysis of variance two variables (personnel types and school district size), vary independently or interact with each other to produce variation in a dependent variable (attitudes toward career education). "Factorial analysis of variance is the statistical method that analyzes the dependent and interactive effects of two or more independent variables on a dependent variable" (p. 213).
The F statistic, with a .05 level of significance, was selected for comparison of means and to test for differences among mean scores.

A test of Least Significant Difference (L.S.D.) was used to determine where specific differences existed between mean scores of the rejected statements.
IV. PRESENTATIONS OF THE FINDINGS

This chapter presents the data obtained from the sample populations and analyzes the data by testing the hypotheses cited in Chapter I. The procedures and the statistical techniques used to conduct the study were detailed in the previous chapter.

The statements in the research instrument are grouped into categories, for presentation and analysis purposes. The categories are: the statements for which the null hypotheses were rejected; the personnel groups and school districts mean scores on statements which they were in agreement; the personnel groups and school districts mean scores on statements on which they took a neutral stand; the personnel groups and the school districts mean scores on the negative value statements; and the personnel groups and the school districts mean scores on the items which a similar view was not expressed by both sides and could not be classified in one of the above categories. The data relative to each individual personnel group, as they represent small, medium and large school district, were also organized in tables, presented and analyzed.

Findings Related to the Rejected Items of the Research Instrument

Items 7, 19, and 38 of the research instrument were rejected by the study participants, as they represented either the personnel
groups, or the small, medium, and large school districts (Table 1 and Appendix C).

The null hypothesis for item 7 of the research instrument was retained by the personnel groups. However, the null hypothesis, as it related to the school district sizes was rejected by the F statistic at .05 level of significance (Table 1). The L.S.D. test procedure was used to further analyze the rejected statement. On statement 7, the difference between group 1 (the small school districts) and group 2 (the medium size school districts) was smaller than the L.S.D., so these means were not significantly different. However, there was a significant difference between the mean scores of group 3 (large school districts) and groups 1 and 2 (small and medium size school districts respectively), because this difference was larger than the computed L.S.D.

Statement 19 is a negative value statement. The personnel groups rejected the null hypothesis on statement 19 of the research instrument, while the populations representing the small, medium and large school districts retained it (Table 1). There was a significant difference between the mean scores of group 5 (career education administrators) and groups 1, 3 and 4 (school board members, non-vocational teachers and school administrators respectively). The difference between the mean scores of group 2 (vocational teachers) and group 4 (school administrators) was also significant.
Table 1. Items of the research instrument for which the hypotheses were rejected.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Personnel Means</th>
<th>Computed F</th>
<th>School District Means</th>
<th>Computed F</th>
<th>Null Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>2.800</td>
<td>2.566</td>
<td>2.833</td>
<td>3.300</td>
<td>3.566</td>
</tr>
</tbody>
</table>

* The F test at .05 level rejects the hypothesis.
The null hypothesis for statement 38 of the research instrument was retained by the respondents, as they represented the three sizes of the school districts involved in the study. However, the F statistic rejected item 38, in the case of personnel groups (Table 1). The L.S.D. test was used to further analyze the rejected statement. There was a significant difference between the mean scores of group 5 (career education administrators) and groups 1, 3 and 4 (school board members, non-vocational teachers and school administrators).

Personnel Groups and School Districts Mean Scores on Items of the Research Instrument, Which Both Groups Were in Agreement

The personnel groups consisted of school board members, vocational teachers, non-vocational teachers, school administrators and career education administrators, and the respondents representing small, medium and large school districts, all agreed with items 4, 8, 10, 11, 13, 14, 18, 22, 24, 25, 30, 32, 34, 35 and 43 of the research instrument, and the null hypothesis for each one of the items was retained (Table 2).

The sample populations, representing the personnel groups and the three different school district sizes both agreed with 45 percent of the positive value statements in the research instrument.
Table 2. Items of the research instrument which all five personnel types and the three school district sizes agreed with.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Personnel Means</th>
<th>Computed F</th>
<th>School District Means</th>
<th>Computed F</th>
<th>Null Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>4.000 4.366 4.233 4.000 4.133</td>
<td>1.3524</td>
<td>4.140 4.220 4.080</td>
<td>.4488</td>
<td>retained</td>
</tr>
<tr>
<td>10</td>
<td>3.900 3.900 4.000 4.166 4.300</td>
<td>1.5000</td>
<td>3.980 4.000 4.180</td>
<td>.9820</td>
<td>retained</td>
</tr>
<tr>
<td>13</td>
<td>4.166 4.000 4.033 4.033 4.166</td>
<td>.4336</td>
<td>4.080 4.040 4.120</td>
<td>.1794</td>
<td>retained</td>
</tr>
<tr>
<td>18</td>
<td>4.333 4.133 4.000 4.000 4.033</td>
<td>1.5789</td>
<td>4.100 4.120 4.080</td>
<td>.0526</td>
<td>retained</td>
</tr>
</tbody>
</table>
Personnel Groups and School Districts Mean Scores on Items of the Research Instrument, Which Both Groups Expressed a Neutral View

The null hypotheses were retained for items 1, 3, 21, 26 and 28 of the research instrument. The study participants, representing the five personnel groups and three different school district sizes, all expressed a neutral opinion toward the above items in the research instrument (Table 3).

The responding groups took a neutral stand toward 12 percent of the statements in the research instrument.

Mean Scores of the Personnel Groups and the School Districts on Statements with a Negative Value

Statements 2, 6, 9, 15, 16, 19, 31, 33, 37 and 42 of the research instrument have a negative value. Disagreement with the above items indicate the rejections of the items, thus, indicating a positive attitude toward career education.

The personnel groups disagreed with items 6 and 31; the school administrators expressed a neutral view on statement 6, and agreed with items 2, 9, 15 and 33. The mean scores differed significantly on item 19, and the F statistic rejected the null hypotheses on this statement (Table 4).

The study participants, representing the small, medium and large school districts agreed with items 2, 9, 15 and 33, and
Table 3. Items of the research instrument on which all five personnel types and school district sizes expressed a neutral position.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Personnel Means</th>
<th>Computed F</th>
<th>School District Means</th>
<th>Computed F</th>
<th>Null Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.000 3.100 3.166 3.000 3.133</td>
<td>.1099</td>
<td>3.210 2.960 3.160</td>
<td>.3484</td>
<td>retained</td>
</tr>
<tr>
<td>3</td>
<td>3.433 3.533 2.966 3.033 3.500</td>
<td>1.672</td>
<td>3.120 3.600 3.160</td>
<td>2.5993</td>
<td>retained</td>
</tr>
<tr>
<td>28</td>
<td>3.300 3.366 3.400 3.166 3.566</td>
<td>.7701</td>
<td>3.400 3.320 3.360</td>
<td>.0963</td>
<td>retained</td>
</tr>
</tbody>
</table>

Table 4. The personnel groups and the school districts mean scores on the items of the research instrument with a negative value.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Personnel Means</th>
<th>Computed F</th>
<th>School District Means</th>
<th>Computed F</th>
<th>Null Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>2.666 2.200 2.600 2.766 2.600</td>
<td>1.3471</td>
<td>2.680 2.500 2.520</td>
<td>.4683</td>
<td>retained</td>
</tr>
<tr>
<td>19</td>
<td>2.800 2.566 2.833 3.300 3.566</td>
<td>*3.9375</td>
<td>2.820 3.000 3.220</td>
<td>1.5824</td>
<td>retained</td>
</tr>
<tr>
<td>31</td>
<td>2.566 2.233 2.100 2.233 2.180</td>
<td>1.0674</td>
<td>2.180 2.340 2.260</td>
<td>.3509</td>
<td>retained</td>
</tr>
<tr>
<td>33</td>
<td>4.400 4.400 4.366 3.966 4.400</td>
<td>1.6544</td>
<td>4.320 4.300 4.300</td>
<td>.0101</td>
<td>retained</td>
</tr>
</tbody>
</table>

*The F test at .05 level rejects the hypothesis.
disagreed with statements 6 and 31. The sample population, representing the small, medium and large school districts, indicated a neutral view toward statement 19 (Table 4).

Mean Scores of the Personnel Groups and the School Districts on Items of the Research Instrument, Which the Groups Have not Taken a Similar Stand

On items 5, 12, 20, 23, 29 and 36, the study participants, representing the personnel groups and the three sizes of school districts, did not express a unified attitudinal stand. The variation of mean scores existed between the groups representing the three school district sizes and the personnel groups (Table 5).

Null hypotheses for all of the above items of the research instrument were retained.

Mean Scores of Each Personnel Group Representing Small, Medium and Large School Districts

Table 6 represents the mean scores of the school board members, vocational and non-vocational teachers, school administrators and the career education administrators, as they represent the small, medium and large school districts.

There was no significant difference among the mean scores and all the hypotheses were retained.
Table 5. The mean scores of the personnel groups and the school districts on items of the research instrument which they did not take a similar stand.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Personnel Means</th>
<th>Computed F</th>
<th>School District Means</th>
<th>Computed F</th>
<th>Null Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>2.766</td>
<td>3.266</td>
<td>2.666</td>
<td>2.900</td>
<td>3.133</td>
</tr>
<tr>
<td>20</td>
<td>1.766</td>
<td>2.066</td>
<td>1.900</td>
<td>1.933</td>
<td>1.866</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------</td>
<td>---------------------</td>
<td>------------------</td>
<td>--------------</td>
<td>------------------</td>
</tr>
<tr>
<td>1</td>
<td>3.10</td>
<td>2.60</td>
<td>3.30</td>
<td>3.30</td>
<td>2.50</td>
</tr>
<tr>
<td>2</td>
<td>3.70</td>
<td>3.90</td>
<td>4.20</td>
<td>3.80</td>
<td>4.00</td>
</tr>
<tr>
<td>3</td>
<td>3.70</td>
<td>3.60</td>
<td>3.00</td>
<td>3.10</td>
<td>3.60</td>
</tr>
<tr>
<td>4</td>
<td>4.20</td>
<td>1.20</td>
<td>4.30</td>
<td>4.10</td>
<td>4.30</td>
</tr>
<tr>
<td>5</td>
<td>3.70</td>
<td>3.40</td>
<td>3.70</td>
<td>4.00</td>
<td>3.80</td>
</tr>
<tr>
<td>6</td>
<td>2.60</td>
<td>3.10</td>
<td>2.30</td>
<td>2.10</td>
<td>2.10</td>
</tr>
<tr>
<td>7</td>
<td>3.90</td>
<td>3.40</td>
<td>3.60</td>
<td>4.10</td>
<td>3.80</td>
</tr>
<tr>
<td>8</td>
<td>4.00</td>
<td>3.80</td>
<td>4.20</td>
<td>4.60</td>
<td>4.40</td>
</tr>
<tr>
<td>9</td>
<td>4.30</td>
<td>4.10</td>
<td>4.50</td>
<td>4.50</td>
<td>4.20</td>
</tr>
<tr>
<td>10</td>
<td>3.90</td>
<td>3.50</td>
<td>4.30</td>
<td>3.80</td>
<td>4.00</td>
</tr>
<tr>
<td>11</td>
<td>4.00</td>
<td>4.10</td>
<td>4.20</td>
<td>4.60</td>
<td>4.00</td>
</tr>
<tr>
<td>12</td>
<td>2.60</td>
<td>2.50</td>
<td>3.30</td>
<td>3.30</td>
<td>3.10</td>
</tr>
<tr>
<td>13</td>
<td>4.30</td>
<td>3.80</td>
<td>4.40</td>
<td>4.10</td>
<td>3.90</td>
</tr>
<tr>
<td>14</td>
<td>3.80</td>
<td>3.80</td>
<td>3.70</td>
<td>3.40</td>
<td>3.60</td>
</tr>
<tr>
<td>15</td>
<td>4.20</td>
<td>4.20</td>
<td>4.50</td>
<td>4.30</td>
<td>4.30</td>
</tr>
<tr>
<td>16</td>
<td>3.20</td>
<td>3.70</td>
<td>3.70</td>
<td>3.50</td>
<td>3.60</td>
</tr>
<tr>
<td>17</td>
<td>2.60</td>
<td>3.50</td>
<td>3.60</td>
<td>3.50</td>
<td>3.30</td>
</tr>
<tr>
<td>18</td>
<td>4.40</td>
<td>4.30</td>
<td>4.30</td>
<td>4.30</td>
<td>4.10</td>
</tr>
<tr>
<td>19</td>
<td>2.50</td>
<td>2.70</td>
<td>3.20</td>
<td>1.90</td>
<td>2.40</td>
</tr>
<tr>
<td>20</td>
<td>1.70</td>
<td>1.90</td>
<td>1.70</td>
<td>2.40</td>
<td>1.80</td>
</tr>
<tr>
<td>21</td>
<td>2.60</td>
<td>2.50</td>
<td>3.80</td>
<td>3.20</td>
<td>3.10</td>
</tr>
</tbody>
</table>
Table 6. Continued.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>4.10 3.60 4.00 3.70 3.90 3.50</td>
<td>3.80 4.00 3.90 3.50 3.60 4.00</td>
<td>3.80 4.00 3.90</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>4.10 3.30 4.10 4.30 4.00 3.80</td>
<td>3.00 3.80 3.80 3.10 3.40 3.80</td>
<td>3.50 4.00 3.80</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>4.20 4.30 4.70 4.16 4.30 4.20</td>
<td>3.70 4.40 4.30 4.00 3.80 4.10</td>
<td>4.30 3.90 3.70</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>3.50 3.20 3.70 3.60 3.60 3.70</td>
<td>2.90 3.70 3.00 3.40 3.50 3.50</td>
<td>4.00 3.90 3.50</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>3.40 3.60 3.70 3.70 3.70 4.00</td>
<td>3.50 3.60 3.40 3.60 4.10 4.10</td>
<td>4.60 3.90 3.30</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>3.50 3.30 3.10 3.40 3.00 3.70</td>
<td>3.30 3.40 3.50 3.10 3.10 3.20</td>
<td>3.70 3.80 3.30</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>4.10 3.60 3.90 4.10 3.80 4.10</td>
<td>3.20 3.60 3.90 2.90 3.70 3.80</td>
<td>3.60 3.70 4.10</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>4.30 4.10 4.10 4.10 4.20 4.30</td>
<td>4.10 3.90 4.00 3.70 4.10 4.00</td>
<td>4.60 4.10 3.90</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>2.70 3.80 3.20 2.10 2.60 2.00</td>
<td>2.10 2.10 2.10 2.00 2.30 2.40</td>
<td>2.00 1.90 2.60</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>4.40 4.40 4.30 4.40 4.10 4.20</td>
<td>4.40 4.50 4.30 4.20 4.00 4.30</td>
<td>4.40 4.10 4.20</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>4.60 4.10 4.50 4.40 4.40 4.50</td>
<td>4.10 4.70 4.30 3.80 4.00 4.10</td>
<td>4.80 4.30 4.10</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>3.40 3.90 4.00 4.60 4.20 4.50</td>
<td>3.70 4.50 4.00 3.90 4.30 3.90</td>
<td>4.10 4.40 4.00</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>4.30 4.40 4.60 4.50 4.20 4.20</td>
<td>4.30 4.70 4.70 4.00 4.50 4.20</td>
<td>4.60 4.60 4.20</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>3.50 3.40 4.10 4.00 4.00 3.80</td>
<td>3.50 4.10 4.30 3.60 4.20 4.20</td>
<td>4.00 3.80 3.70</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>3.40 3.10 3.60 3.50 3.70 3.70</td>
<td>2.90 3.40 3.10 3.00 3.30 3.40</td>
<td>3.00 3.40 3.50</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>3.60 3.40 3.10 3.10 3.20 2.70</td>
<td>3.40 3.60 3.20 3.20 3.80 3.00</td>
<td>2.80 2.70 2.60</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>3.80 3.70 3.70 4.00 3.70 3.60</td>
<td>3.60 3.90 3.50 3.20 3.70 3.40</td>
<td>3.80 3.10 3.00</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>3.50 3.40 3.90 3.80 3.60 3.90</td>
<td>2.90 4.00 3.70 3.50 3.40 3.70</td>
<td>3.30 3.50 3.30</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>3.80 3.20 4.10 3.70 3.70 4.00</td>
<td>3.10 4.10 3.90 3.10 3.50 3.90</td>
<td>3.50 3.80 3.30</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>3.80 3.30 3.40 3.80 4.00 3.30</td>
<td>3.60 3.60 3.40 3.90 4.00 3.90</td>
<td>4.00 3.40 4.00</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>3.30 4.00 4.50 4.10 4.00 3.50</td>
<td>3.90 3.90 3.50 3.70 3.90 3.80</td>
<td>3.90 4.40 4.20</td>
<td>retained</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Study Participants, Representing the Personnel Groups and the School District Sizes and Their Attitudes on the Statements of the Research Instrument, Expressed in Percentages

The data of Table 7 reflects the appropriate conversion of the values on the statements of the survey instrument with a negative value.

The school board members from the large school districts agreed with a higher percentage of the items of the research instrument (60 percent), than the school board members representing the medium and the small school districts, who agreed with 37 and 56 percent of the items in the research instrument respectively (Table 7).

Among the vocational teachers, those from the small and large school districts agreed with 60 percent of the statements in the research instrument, while those representing the medium size school districts agreed with 58 percent of the statements. The position of the vocational teachers, representing the three different school district sizes, in regard to disagreement or neutral views toward the statements of the research instrument, closely matched (Table 7).

The non-vocational teachers from the small school districts agreed with 46 percent of the items in the survey instrument, while those representing medium size school districts agreed with 60 percent of them. The non-vocational teachers from the large school districts disagreed with 14 percent of the statements in the survey.
instrument, while those from the small school districts disagreed with 26 percent (Table 7).

The school administrators from the small school districts agreed with 37 percent of the statements in the research instruments, while the rate of agreement for those representing the large school districts was 53 percent. A neutral position was expressed on 45 percent of the items of the research instrument by school administrators representing the small school districts (Table 7).

Table 7 shows that the career education administrators representing the small school districts expressed agreement with 60 percent of the items in the research instrument. Those from the large school districts agreed with 49 percent of the statements in the research instrument, and disagreed with more of the items, 23 percent, than did the career education administrators from the medium and small school districts, who disagreed with 14 percent of the statements in the survey instrument.

The Personnel Groups Attitudes on the Statements of the Research Instrument Expressed in Percentages

Table 8 depicts the attitudes of the five personnel groups on the statements of the research instrument.

The vocational teachers agreed with the highest percentage of the items in the survey instrument, 59 percent, followed by the
Table 7. The study participants representing the personnel group and the three school district sizes and their attitudes on the statements of the research instrument, expressed in percentages.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Agree</td>
<td>56</td>
<td>37</td>
<td>60</td>
<td>46</td>
<td>60</td>
</tr>
<tr>
<td>Neutral</td>
<td>26</td>
<td>42</td>
<td>26</td>
<td>28</td>
<td>19</td>
</tr>
<tr>
<td>Disagree</td>
<td>18</td>
<td>21</td>
<td>14</td>
<td>26</td>
<td>21</td>
</tr>
</tbody>
</table>

Table 8. The personnel groups attitudes on the statements of the research instrument, expressed in percentages.

<table>
<thead>
<tr>
<th>Attitudinal Position</th>
<th>School Board Members</th>
<th>Vocational Teachers</th>
<th>Non-Vocational Teachers</th>
<th>School Admin.</th>
<th>Career Education Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Agree</td>
<td>51</td>
<td>59</td>
<td>52</td>
<td>48</td>
<td>56</td>
</tr>
<tr>
<td>Neutral</td>
<td>28</td>
<td>25</td>
<td>27</td>
<td>33</td>
<td>27</td>
</tr>
<tr>
<td>Disagree</td>
<td>18</td>
<td>16</td>
<td>20</td>
<td>19</td>
<td>17</td>
</tr>
</tbody>
</table>
career education administrators with 56 percent. The school administrators agreed with the fewest number of the statements and had a 48 percentage (Table 8).

The school administrators expressed a neutral position toward 33 percent of the statements, the highest among the personnel groups. The vocational teachers took a neutral stand toward 25 percent of the statements in the survey instrument, the lowest among the personnel group (Table 8).

The non-vocational teachers expressed disagreement with 20 percent of the statements, followed by the school administrators who had a 19 percent rate of disagreement. The vocational teachers disagreed with the fewest number of statements in the survey instrument (Table 8).

The data in Table 8 reflect the appropriate conversion of the values on the statements of the survey instrument with negative values.
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The Purpose

The overall purposes of this study were two-fold:

1. To identify and analyze the attitudes of vocational and non-vocational teachers, school administrators, career education administrators and school board members toward career education.

2. To identify and analyze the attitudes of the above five personnel types toward career education, on the basis of the size of the school district they represent. Three sizes of school districts were represented in the study: small, medium, and large.

The specific objectives of the study were to identify and analyze the following:

1. The attitudes of the vocational teachers in grades 11-12, toward career education.

2. The attitudes of the non-vocational teachers in grades K-12, toward career education.

3. The attitudes of the school board members in Oregon, toward career education.

4. The attitudes of the school administrators in grades K-12, toward career education.
5. The attitudes of career education administrators in grades K-12, toward career education.

6. The attitudes of the above personnel types, toward career education, as they represent small, medium, and large school districts.

Procedures

On the basis of an extensive review of the literature, a research instrument for the study was developed. A jury panel of Oregon educators studied and finalized the research instrument. A five point Likert-type scale was used to solicit the respondents' views toward career education.

The Oregon State Department of Education practices in grouping the school districts into size categories, for its operational purposes, were followed in classification of the school districts in this study. Six large school districts, 12 medium size school districts, and 25 small school districts were randomly selected from throughout the state for this study. The names of the personnel in the randomly selected schools were obtained, and the sample population was randomly selected within stratified groups, from the randomly selected school districts.

Each one of the five personnel groups was represented by 30 randomly selected study participants. Ten of the participants were
from the small school districts, ten from medium size school districts, and ten from large school districts. The personnel groups involved in the study were: school board members, vocational teachers, non-vocational teachers, school administrators and career education administrators. A total of 150 randomly selected individuals, representing five different personnel groups and three sizes of school districts, were involved in the study.

The survey research technique was utilized to collect the data for the study. The research instrument, along with instructions for completion, were sent to 240 respondents to obtain the 150 needed completed survey instruments. The overall rate of return for the instrument was 78 percent.

Analysis of Data

The collected data were committed to electronic data processing technique for compiling and computer analysis of the survey items.

The study utilized a two-way analysis of variance, fixed design, and equal cell size matrix. The mean score differences among the personnel groups and the school district sizes was used to test the study's hypotheses. The test used to analyze contrasts among the mean scores for each statement was the F statistic with the .05 level of significance being used to determine differences existing among the
personnel groups, school sizes and the interaction effect between the two.

The Least Significant Difference (L. S. D.) test was used to determine the specific differences existing between mean scores of the rejected statements. For purpose of further analysis, the statements in the research instrument were grouped in categories in tables. The statements were assigned to the categories and they were assumed to be indicative of the nature of the category.

Conclusions

The following specific conclusions can be drawn on the basis of the findings of this study:

1. The study participants expressed general support for career exploration (statements 3, 8 and 18), work experience (statements 10 and 36), career guidance (statements 4, 8, 13, 30 and 31) and the preparatory role of career education for the world of work (statements 5, 6, 13, 22, 32, 34 and 35).

2. Vocational teachers agreed with more of the statements in the research instrument than did the other four personnel groups.

3. The null hypotheses were retained on 40 statements and rejected on 3 statements. The school district respondents rejected the null hypothesis on statement 7 as they did not
view student organizations as a viable part of the career education concept. Statements 19 and 38 were rejected by the personnel groups, thus, resulting in the expression of views that career education should be viewed as another addition to the curricula, and that most classroom teachers, in general, are not receptive to the infusion of the career education concept into their existing programs of study.

4. The study participants, representing the personnel groups and the school district sizes, disagreed with the statement that the school should place all graduates in jobs or post-secondary schools.

5. The respondents representing the small, medium and large school districts and the personnel groups agreed that a large number of students leaving school lack salable skills.

6. All of the responding groups expressed negative attitudes toward the effect of career education on the quality of education, and viewed it as a frill.

7. It was agreed by all of the responding groups that career education should only be the responsibility of vocational teachers.

8. The study participants representing the three school district sizes and the personnel groups, with the exception of career education administrators, agreed that the introduction of
career education in the schools did upset the existing organization of schools.

**Suggestions for Further Study**

Based on the finding of this study and subsequent conclusions, the following suggestions for further study are proposed:

1. Additional research is recommended to find out the reason for variation in attitudes among the personnel groups and the respondents representing the school district sizes, on the items of the research instrument which were rejected by either one of the above groups.

2. Additional study should be conducted to further clarify the attitudes of the study participants on the following statements of the research instrument which they agreed with:
   (a) introduction of career education in the school would lower the quality of education;  
   (b) career education should only be the responsibility of vocational teachers;  
   (c) career education is another educational frill.

3. An in-service model should be developed with a focus upon the statements which the respondents expressed a neutral attitude.

4. The State Department of Education needs to develop strategies to involve educators, at all levels, in in-service activities
in career education.

5. The research instrument, developed for this study and presented as Appendix C, should be given further use and its usefulness evaluated.

Implications

Based on the findings and the conclusions of the study, the following implications can be stated:

1. There is a high degree of homogeneity of attitudes toward career education among the personnel groups, implying either a good understanding and positive attitudes toward career education, on the part of personnel groups such as school board members and the non-vocational teachers, or not a very strong support for career education on the part of the personnel groups such as the career education administrators and the vocational teachers.

2. Despite the fact that some of the major components of the career education concept, such as work experience, career guidance, career exploration and preparation for the world of work were supported, negative attitudes were expressed toward the effect of career education on education and it was viewed as a frill. This may imply that while there is support for the career education concept, there is a lack of
commitment on its implementation. This implication is further amplified by the fact that the responding groups viewed career education as only the responsibility of vocational teachers.

3. Agreement with the statement that career education should be viewed as another addition to the curricula, may imply that in the respondents' opinion career education's interest is best served by being a separate component in the total curricula, or the fact that career education is actually treated as a separate course or program in some Oregon schools.

4. The overall views of the study participants to the research instrument implies the need for continuing efforts in staff development, in the area of career education.
BIBLIOGRAPHY


APPENDICES
APPENDIX A

STUDIES USING ATTITUDINAL INSTRUMENTS TO
MEASURE ATTITUDES TOWARD CAREER EDUCATION


4. The Institute for Educational Development. Attitudes Toward Career Education: A Report to the Center for Vocational and Technical Education. The Ohio State University, Columbus, Ohio. 1972.
APPENDIX B

JURY PANEL OF EDUCATORS INVOLVED IN THE DEVELOPMENT OF THE RESEARCH INSTRUMENT FOR THE STUDY
Dr. Darrell Ward  
State Department of Education

Dr. Jim Ashlock  
Higher Education

Dr. Alvin Pfhal  
Intermediate Education District

Mr. Robert Elden  
Local Education Agency
SURVEY OF ATTITUDES TOWARD
CAREER EDUCATION

DIRECTIONS:

Please circle the response which corresponds most closely to your opinion about each item on this instrument.

Please do not spend much time on any particular item. There are no right or wrong answers.

Please answer every item.

EXAMPLE:

All high school students should have work experience before graduating from high school. SA A N  D  SD

SA = Strongly Agree            D = Disagree
A = Agree               SD = Strongly Disagree
N = Neutral or do not know

This person disagrees with the item to some extent and indicated this by circling D (Disagree).

The number on this form (No. ) is to help the investigator in his record keeping. Individual replies are confidential and in no case will they be revealed.

No.

PLEASE BEGIN HERE

1. The school should prepare every student for a career

SA A N D SD

2. Starting career education in our school did/would upset the existing organization of the schools.

SA A N D SD

3. All teachers in a school should have non-teaching work related experiences to increase their understanding of careers.

SA A N D SD
4. Parents and employers should be involved with the school in preparing students for careers.

5. Preparation for professional careers (i.e., engineering, accounting, medicine, etc.) should be part of the career education concept.

6. In general, for most high school students, academic courses would be more useful than vocational skill training courses.

7. Student organizations should be a viable part of career education.

8. 'Hands-on' experience should be an essential aspect of career exploration.

9. Introduction of career education in the school would lower the quality of education.

10. Credit should be given to high school students for supervised work experience.

11. Educational preparation for work should be a continuing process.

12. Education should be centered on a career education theme.

13. Students should be assisted in relating what goes on in the classroom to the requirement of various occupations.
14. Students should begin to develop their 'self-awareness' early in their school program and recognize that their interests, aptitudes, and values should be considered in making career choices.

*15. Career education should only be the responsibility of vocational teachers.

*16. 'Career education' is another name for vocational education.

17. In general, many teachers are unaware of career implications of the courses they teach.

18. Teachers and counselors should be trained to help students explore occupational tasks and responsibilities.

*19. Career education should be viewed as another addition to the present curriculum.

20. The school should place all graduates in jobs or post secondary schools.

21. Career education will require revision of the subject matter content.

22. An effective program of career education should lower the dropout rate.

23. Preparation for entry level employment should be an element of the student's education.
24. In general, a large number of students leaving school lack salable skills.

25. The training of workers should not be the sole responsibility of the public school system.

26. Career education provides learning experiences geared to individual needs better than traditional academic curricula.

27. Career awareness as a basis for occupational understanding should be a part of elementary education.

28. In general, school guidance personnel tend to direct students toward college preparatory courses.

29. Prior to high school graduation, students should be encouraged to enroll in courses which prepare them for employment.

30. Career guidance should be a part of every school program.

*31. Occupational decisions should not be made until after leaving high school.

32. Career education should enable the students to recognize that academic skills have application to the world of work.

*33. Career education is another educational frill.

34. Career education is as important for college bound students as it is for non-college bound students.
35. The emphasis on college for everyone should be replaced by emphasis on education more appropriate to meet individual needs and abilities.

36. Education should include work experiences for effective preparation for the world of work.

*37. The general education curriculum is the best all-around preparation for entry into an occupation.

38. In general, most classroom teachers are receptive to the integration of career education into existing program of studies.

39. In general, a student's choice of career can be changed by career education in school.

40. In general, guidance counselors do not know enough about career possibilities for students.

41. If schools were more career-oriented, they would be more useful to students.

*42. Separate courses on career education would be better than incorporating the concept into existing programs.

43. In general, most people finish high school not knowing what kind of career they prefer.

*The statement designated with an asterisk has negative value.
APPENDIX D

LIST OF RANDOMLY SELECTED SCHOOL DISTRICTS USED IN THE STUDY
Large School Districts

David Douglas 40
Bend 1
Lincoln CU
Parkrose 3
Central Point 9
Lynch 28

Medium School Districts

Eagle Point 9
Winston-Dillard 116
Phoenix 4
Coquille 8
Sutherlin 130
Sherwood 88J
Lakeview 7
Chenowith 9
Albany 5
Canby 86
Reedville 29
Lebanon UH1

Small School Districts

Creswell 40
Banks 13
Willamina 30J
Neah-Kah-Nie 56
Jefferson 14J
Dayton 8
John Day 3
Colton 53
Sheridan 48J
Vernonia 47J
Corbett 39
Port Orford-Langlois 2J
Riddle 70
Warrenton 30
Enterprise 21
Amity 4J
Mill City 129J
Lewis & Clark 5
Union 5
Gaston 511J
Pine Eagle 61
Umatilla 6
Lowell 71
Wallowa 12
McKenzie 68
APPENDIX E

COVER LETTER FOR QUESTIONNAIRE
February 2, 1976

Dear Colleague:

Your help is needed in a state-wide study being conducted under the auspices of the School of Education at Oregon State University. This study is concerned with determining the attitudes of various groups of Oregon educators toward career education.

The results of this study will help to provide sound and beneficial data and information to institutions of teacher training, local school boards and state board of education, local school administrators and the state department of education.

The enclosed questionnaire will take not more than 10 minutes of your time to complete and return in the enclosed stamped, self-addressed envelope (the average time on a sample population was 9 1/2 minutes). Please complete the questionnaire and return it as soon as possible, since other phases of the research depend on your response. Your reply will be confidential. Any references resulting from this project will be based on group responses. Names of school districts and participants will not be used. All data will be analyzed and reported in a composite manner. Results of the study will be available for your use should you desire to have them.

Sincerely,

Joseph Hlebichuk
School of Education
Oregon State University

Joe H. Ghaffari
Study Director

jmm
Enclosure
APPENDIX F

FOLLOW UP LETTER FOR QUESTIONNAIRE
February 15, 1976

Dear Colleague:

Recently you should have received a copy of the enclosed questionnaire which asks for information regarding your attitudes toward career education.

Your reply is needed to complete this state-wide study.

If due to your busy schedule, you have not already completed the questionnaire, will you be kind enough to take a few minutes to complete the enclosed questionnaire and return it to me? A self-addressed stamped envelope is enclosed for your convenience. There is still time to have your reply included in the study results.

If you have already completed a copy of the questionnaire, please disregard this letter. If not, I would greatly appreciate your reply as soon as possible.

Thank you for your assistance and cooperation.

Sincerely,

Joseph Hlebichuk
School of Education
Oregon State University

Joe H. Ghaffari
Study Director