THE ASSOCIATION BETWEEN LOCAL SCHOOL ADMINISTRA
TORS' AND COUNSELORS' ATTITUDES TOWARD VOCA
TIONAL EDUCATION AND SELECTED CHARACTER
ISTICS OF THEIR STUDENTS ATTENDING A

VOCATIONAL-TECHNICAL SCHOOL

Ву

GLEN MARTIN GARDNER

Bachelor of Science Oklahoma State University Stillwater, Oklahoma 1943

Master of Science Oklahoma State University Stillwater, Oklahoma 1947

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
DOCTOR OF EDUCATION
May, 1972

Ilesia 19720 G226a cop 2

AUG 10 1973

THE ASSOCIATION BETWEEN LOCAL SCHOOL ADMINISTRATORS' AND COUNSELORS' ATTITUDES TOWARD VOCATIONAL EDUCATION AND SELECTED CHARACTERISTICS OF THEIR STUDENTS ATTENDING A
VOCATIONAL-TECHNICAL SCHOOL

Thesis Approved:

Thesis Adviser

Thesis Advis

ACKNOWLEDGMENTS

Many individuals have been very helpful to me during the past two years. I hesitate to mention any because I know that I will be leaving out others, however, I feel that some should have special recognition.

First, I must express my gratitude to my committee chairman Dr. Robert Price. Dr. Price has been a true inspiration to me for many years and has encouraged and stimulated me during my entire doctoral program, especially during the preparation of this dissertation.

My other committee members, Dr. Bill Stevenson, Dr. Dean Schriner, and Dr. Lloyd Wiggins, have been extremely helpful and have always willingly given their advice, encouragement and suggestions.

A special thanks is also due Mr. J. R. Gilliland,
Superintendent of Canadian Valley Area Vocational-Technical
School, and his entire staff for assisting in gathering the
data necessary for this study.

Mr. Bill Powers, Superintendent of Kiamichi Area Vocational-Technical School, has given much help and encouragement to me during the past three months.

I am indeed grateful to Mrs. Amanda Copeland for proofreading, typing, and for her helpful comments. Also, gratitude goes to Mrs. Patsy McCrary for proofreading and correcting this manuscript.

I wish to dedicate this dissertation to my family. To my daughter Mary, my sons Glen Jr., Billy, David, and Terry, and to my wife Viola. Viola certainly deserves my praise and special thanks for her patience, love and understanding and for so willingly accepting the role of a "college widow" the past two years.

TABLE OF CONTENTS

Chapte:	r	Pag e
I.	INTRODUCTION	1
	Statement of the Problem	5
	Purposes of the Study	6
	Assumptions	7
	Limitations of the Study	8
	Definition of Terms	8
II.	REVIEW OF LITERATURE	12
	Introduction	12
	Attitudes, Attitude Change, and the	
	Authority Figure Influence	14
	Openness of Personality	21
	The Image of Vocational Education	23
	Oklahoma Area Vocational-Technical	
	Studies	33
	Summary	34
III.	DESIGN AND METHODOLOGY	37
	Population	37
	Design	38
	Instruments Used	39
	Hypotheses Tested	41
IV.	PRESENTATION AND ANALYSIS OF THE DATA	46
	Relationship Between the Attitudes of	
	Administrators and Counselors Toward	
	Vocational Education	48
	Attitudes of Administrators and	
	Counselors as Related to Attitudes	
	of Students	52

Chapter	Page
Attitudes of Administrators and Counselors as Related to General Learning Ability of Students Enrolled in the Area Vocational-	
Technical School	59
School	65
and Student Attitudes	69
Chapter Summary	74
V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	76
Conclusions	80
Implications of the Study	82
Recommendations for Further Study	82
A SELECTED BIBLIOGRAPHY	84
APPENDIX A - ATVE SCALE	88
APPENDIX B - DOGMATISM SCALE	99
APPENDIX C - APTITUDES MEASURED BY THE GATB	104
APPENDIX D - TABLES OF SUMMARY OF DATA	106
APPENDIX E - PERMISSION LETTERS	109

LIST OF TABLES

Table		Pag e
I.	Relationship Between Administrators' and Students' ATVE Scores	55
II.	Relationship Between Counselors' and Students' ATVE Scores	56
III.	Relationship of ATVE Scores	58
IV.	Students' GLA Scores as Related to Administrators' ATVE Scores	61
v.	Students' GLA Scores as Related to Counselors' ATVE Scores	62
VI.	Students' GLA Scores as Related to Administrators' and Counselors' ATVE Scores	64
VII.	Students' Occupational Pattern Scores as Related to Administrators' ATVE Scores	66
vIII.	Students' Occupational Pattern Scores as Related to Counselors' ATVE Scores	67
IX.	Students' Occupational Pattern Scores as Related to Administrators' and Counselors' ATVE Scores	68
x.	Students' ATVE Scores as Related to Their Dogmatism Scores	71
XI.	Students' Change in Attitude Toward Vocational Education as Related to Their Dogmatism Scores	74

Table				Pag e
XII.	ATVE Scores of Administrators and Counselors (or Persons Serving as Counselors) and the Mean ATVE Score			
	of Students from Their School	•	•	107
XIII.	Results of Areas Measured for Students .	•		108

CHAPTER I

INTRODUCTION

The public schools of Oklahoma face a unique challenge in the years ahead. They are charged with preparing all young people for the world of work, up-grading present workers, and re-training the large number of adults who need new skills. The 1968 Vocational Education Amendments placed emphases on the individual and not on any particular program. Never before in history has vocational education faced such a challenge nor had as many funds to enact programs that would meet the goal of a true education for all.

The Muskogee Daily Phoenix Times-Democrat (1971), citing a recently released Census Bureau report, stated that there had been "an explosive growth" in the amount of education attained by Americans in the past years. The report showed that 16 per cent of young Americans have a college degree. If this report were turned around, it would show that 84 per cent do not have college degrees. This is the group that must be of major concern to vocational educators.

Between the school years of 1964-65 and 1969-70, the number of college students mushroomed from 4.6 million to 7.4 million. This has been widely published and much discussed. In the same period the number of young Americans enrolled full time in vocational or technical training courses above the high school level zoomed from 150,000 to about two million. There has been very little public information concerning this. Vocational training seems to still be the neglected "stepchild" of the education industry (Muskogee Daily Phoenix Times-Democrat, 1971).

In the Second Report of the National Advisory Council of Vocational Education (1969), the following statement is made:

One of the major reasons why vocational education has not been more extensively developed in the public schools of the Nation is that there has been little commitment to do so. The driving urge to provide vocational education opportunity has been lacking in most public schools.

This report further states that a commitment must be forthcoming from all levels of education. This should include a
complete program starting in the elementary levels with
career orientation, to the Junior High School with career
exploration, and into the Senior High School where adequate
counseling and leadership from all levels of the administration is important for proper vocational choice.

Divita (1968), Chang (1971), and others have found that the image of vocational education in the minds of administrators and counselors, in many instances, has seemed to be somewhat distorted.

The attitudes of the public, including school personnel, toward vocational education have been a source of concern for many years. The First Annual Report of the National Advisory Council on Vocational Education (1968) indicates that the educational mind has been tuned to the idea that college attendance represents the only values in education worthy of consideration. This report further states that this belief has been shared by all segments of our society and that these attitudes must be changed.

Chang (1971) believes that many administrators have hesitated to promote vocational education because of the belief that a bias or stigma is attached to vocational education and the administration's desire to avoid a negative-status association.

Vocational education should be for all who want it and desire it. An editorial in the Muskogee Phoenix Times
Democrat (1971) quoting Irving Goldstein, President of Charron-Williams Systems, Inc., states:

Society is creating a large number of educated incompetents because of its unrealistic demands that a student must have a four year degree.

When a student drops out of a four year college program he has a feeling of failure and is completely without direction. By contrast a student pursuing a vocational education course has a sense of immediate accomplishment, a sense of purpose and direction.

Oklahoma has answered the challenge of education for all with the Area School concept and improvement of the vocational programs in the local schools. Programs must be developed that provide the right combination of courses for each individual student. It then becomes imperative that students receive assistance and guidance in selecting the program that will serve them best.

Miller (1971) states that surveys at Oklahoma State

Tech indicate that a very small percentage of the students

enrolled there have been referred to the school by counse
lors or administrators at the students' home schools.

Vocational-technical educators must become aware of this

problem and study ways to correct it.

What are the attitudes of administrators and counselors toward vocational education? How do their attitudes relate to the attitudes of the students from their schools who attend the area schools? If as Hoyt (1970) suggests, many administrators and counselors have negative perceptions toward vocational education, why do they? This study attempted to examine some aspects of the image of vocational

education. It also sought to determine the relationship that this image had to student characteristics of area vocational-technical school enrollees.

The First Annual Report of the National Advisory

Council on Vocational Education contained this statement

concerning attitudes toward vocational education:

At the very heart of our problem is a national attitude that says vocational education is designed for somebody else's children. This attitude is shared by businessmen, labor leaders, administrators, teachers, parents, and students. We are all guilty The attitude infects the Federal government, which invests \$14 in the Nation's universities for every \$1 it invests in the Nation's vocational education program.

The national attitudes toward vocational education, then, are of major concern to all in our society. The relationship of these attitudes to student characteristics could be very important.

Statement of the Problem

The National Advisory Council (1968) concluded the first annual report by stating:

We have promoted the idea that the only good education is an education capped by four years of college. This idea infects students who make inappropriate choices because they are victims of a national yearning for prestige.

Administrators of area vocational-technical programs repeatedly encounter difficulty in contacting and enrolling

students whose abilities match program offerings which are based on employment opportunities.

Studies quoted elsewhere in this dissertation indicate that many school administrators and counselors view vocational education as appropriate only for the "low status" student and the one who cannot succeed in an academic field.

The fact that these attitudes could unduly influence students in making training and occupational choices was the major concern in planning and developing this study.

Students who are enrolling in only academic courses could possibly be ignoring vocational-technical education because of such public school orientation.

Purposes of the Study

The major purpose of the study was to determine if a significant association existed between administrators' and/or counselors' attitudes toward vocational education and the general learning abilities, skill aptitudes and attitudes toward vocational education of students from their school who are currently attending an area vocational school.

The secondary purposes of the study were identified to determine:

1. If there was a significant difference between the

- attitudes toward vocational education of local school administrators and counselors.
- 2. If there was an association between the attitudes toward vocational education of administrators and counselors serving in the same school.
- 3. If a significant association exists between the individual student's dogmatism score and his attitude toward vocational education.
- 4. If a significant student attitude toward vocational education change occurred after one semester of enrollment at an area vocational-technical school and if this change might be associated with his score on the dogmatism scale if such a change did occur.

Assumptions

A major assumption underlying this study was that the attitudes of the administrators, counselors, and students toward vocational education could be adequately measured with the ATVE Scale.

A secondary assumption was that the measured relationships in the study were true measures of the relationships that do exist.

Minor assumptions were these:

- 1. The responses obtained through the use of the ATVE Scale and the Dogmatism Scale were true and honest responses of the individuals involved.
- 2. Counselors offered honest opinions of their own and did not attempt to give the opinions that they believed their administrators held.

Limitations of the Study

The investigator realized that a major limitation of the study was that it considered only one area school in Oklahoma. The study can then be valid only for this area, and for this group of students, however, if the results seem significant enough, the study can be replicated in other areas.

Another limitation of the study was that it was for only one group of students—those that enrolled for the first time at the Canadian Valley Area Vocational-Technical School in the fall of 1971.

Definition of Terms

Area Vocational-Technical School: These are centralized vocational-technical schools which provide vocational
education opportunities for students from several surrounding high school districts which cannot, for financial
reasons or lack of sufficient enrollment, afford to offer
large numbers of vocational programs in their own individual schools. Students, generally, are transported by bus
to the "area vocational-technical school" for one-half day
of instruction in vocational and related subjects and returned to the home school for the remaining half-day of

instruction in general education subjects and for other home school activities.

Independent School Districts: Self-governing school districts offering a complete program of education from grades 1 through 12. These districts may offer some vocational programs in their own schools.

Home School: The school in which the area student is regularly enrolled. Credits at the area school will be credited at the home school toward secondary school graduation. In Oklahoma the student who attends the area school is carried as a full-time student at the home school.

Attitudes Toward Vocational Education: As referred to in this study, attitudes are the concepts or ideas of the individuals surveyed toward vocational education as measured by the ATVE Scale (see Appendix A). Also, for the purposes of this study, the terms positive and less positive should be considered synonymous with favorable and less favorable; and ATVE scores and attitudes toward vocational education are synonymous.

Administrator: The chief school officer of the school system. For the purposes of this study, this individual was the school superintendent in most instances. However, in instances where the superintendent was over a number of

schools, the principal was selected as the chief administrative officer for that high school.

Counselor: For purposes of this study, it was recognized that many small districts in Oklahoma do not have
counselors; often the principal of the school acts as the
counselor. Inclusively used in this study, the term refers
to the individual who, regardless of title, is serving in
the capacity of counselor.

Attitude Change: In this investigation, the term was used to refer to any change in an individual's attitude toward vocational education as measured by the ATVE Scale.

Open Mindedness: This refers to an individual who is flexible in his ideas concerning new situations. New information and ideas are accepted readily if they have merit.

Closed Mindedness: This refers to an individual who is not flexible in his ideas concerning new situations. He tends to have frozen concepts, beliefs and attitudes.

Authority Figure: This refers to the position that one occupies, the expertise that he has, or the emotional ties that he has with others that cause him to have an influence on the attitudes and actions of others.

Dogmatism Scale: The Dogmatism Scale refers to the instrument developed by Rokeach (1960) for the purpose of

attempting to measure open mindedness and closed mindedness. Form E was used in this study.

ATVE Scale (Attitude Toward Vocational Education): A scale developed at the University of Nebraska to measure an individual's attitude toward vocational education. The scale was based on Osgood and Tannenbaum's reference (see Appendix A).

GATE Test (General Aptitude Test Battery): A series of tests developed by the United States Employment Service to test aptitude for a wide range of occupations.

GLA (General Learning Ability): The ability to "catch on" or understand instruction and underlying principles; the ability to reason and make judgments. This is closely related to doing well in school.

Occupational Pattern: Various occupations require minimum scores in the various areas tested. If a student meets the minimum scores for an occupation, he has "passed the pattern" for that occupation.

CHAPTER II

REVIEW OF LITERATURE

This chapter contains a review of literature relative to attitudes, the authority figure and the effects of the authority figure on attitudes, the image of vocational-technical education and the results of some studies of Oklahoma Area Vocational-Technical Schools. The area under study lends itself to the following organization for review purposes: (1) Introduction, (2) Attitudes, Attitude Change, and the Authority Figure Influence, (3) Openness of Personality, (4) The Image of Vocational-Technical Education, (5) Studies Concerning Area Vocational-Technical School Students in Oklahoma, and (6) Summary.

Introduction

This study involves the attitudes of administrators and counselors, or persons serving as counselors, toward vocational education and the possible relationship of these attitudes to the attitudes, mental abilities, and skill aptitudes of area school students.

Secretary of

In 1968 legislation in the form of Public Law 90-576

(Amendments to the Vocational Education Act of 1968)

implied the need for more vocational training of our youth.

Title I. Part D. of this Act states:

The Congress finds that it is necessary to reduce the continuing seriously high level of youth unemployment by developing means for giving the same kind of attention as is now given to the college preparation needs of those young persons who go on to college, to the job preparation needs of the two out of three young persons who end their education at or before completion of the secondary level, too many of whom face long and bitter menths of job hunting or marginal work after leaving school. The purposes of this part, therefore, are to stimulate, through financial support, new ways to create a bridge between school and earning a living for young people who are still in school, who have left school either by graduation or by dropping out, or who are in post secondary programs of vocational preparation, and to promote cooperation between public education and manpower agencies.

This legislation clearly shows that Congress has responded to the "crying" need for more vocational education for secondary students in the public schools and students who dropped out before completing their secondary education.

One of the major problems facing the planners of public vocational education has been how to reach all of those students who need vocational training. The "old image" of vocational education—that it is only for the weak academic and/or problem student—has hung like a dark cloud over the bright hope and desire of all who need and can

profit from it. Arnold (1969) states:

Recent congressional action has been a catalyst not only for reviewing and restructuring the priorities and goals for vocational and technical education, but has also exhibited both implied and stated concerns for developing the leadership required for attainment of those goals.

Who is responsible for this "old image"? How can it be changed? Is this image now changing? These and other questions need to be answered if vocational education is to truly "bridge a gap between school and earning a living" for our youth today.

Attitudes, Attitude Change, and the Authority Figure Influence

The investigator felt that a rather complete review of literature concerning attitudes, attitude change, and the authority figure influence was germane to this study.

As considered in this study, authority figures are those persons who are in a position and who have the capacity to influence and control the attitudes and beliefs of others. Zaleznik (1964) declares:

Sources of authority come from the position one occupies and the emotional ties that are established between the figure and the one he has authority over . . . to be told or advised what to do or think by another person is quite different from discovering or learning what to do or think by one's self.

It must be realized, therefore, that no one person or groups of persons can completely change the attitudes of another; however, they can have a marked influence on a change or the development of an attitude or attitudes.

This study sought to determine the relationships between the attitudes of administrators and counselors, or persons serving as counselors, toward vocational education and that of the students under their guidance and control. School ties are often emotional ties that can play an important part in the thoughts, feelings, and beliefs of students. It is recognized that these ties would perhaps be closer between the teacher and the student than between the administrator or counselor and the student, however, the administrator and counselor occupy important positions with regards to vocational education and the student.

The first authority figure for young people is, of course, their parents; and this influence continues to be an important one in the developing of attitudes of youth. However, very early in the young person's life, school personnel come on the scene as authority figures that also influence attitudes.

There are several ways that can be used to determine attitudes. The two most common methods are the interview and the questionnaire. A combination of the two will often

produce better results than either one alone.

One of the major problems encountered with attitude measurement is the validity of the survey. The value of the score, and thus the measure of attitude, is dependent upon the cooperation of the person responding. It is impossible to determine if the subject is honestly expressing his beliefs or if his actual behavior conforms to his responses.

According to Noll (1967):

. . . the measurement of attitudes is carried out by self-report measures. One method is to present to the subject a list of statements expressing attitudes varying widely from very favorable to very unfavorable.

This, and other methods, all depend upon the honesty of the response by the individuals being surveyed.

There are many different definitions of attitudes, however, all of them are of a similar nature. Remners (1959) indicates that:

Attitudes may be defined as an affectively toned idea or group of ideas predisposing the organism to action with reference to specific attitude objects. . . Attitudes are theoretically a component of all behavior, evert or covert. . . A child will acquire attitudes like those of his friends, and the other primary groups with which he is associated . . in general the closer the relationship between an individual and others, the greater will be the potency of such relationships in the formation of attitudes.

The implications for the public schools are clear.

Schools, or individuals within the school, cannot hope to

change students' attitudes toward education by simply asking them to change their attitudes. There must be a definite commitment on the part of all school personnel to develop a climate that is favorable toward change.

This study sought to determine the relationship between the attitudes of administrators and counselors toward vocational education and that of the students under their guidance and control.

Heyt (1970) believes that administrators, counselors, teachers, and others must indicate clearly that vecational education is an important and valuable part of education.

The First Annual Report of the National Advisory
Council on Vocational Education (1969) states:

Each city in the country succeeds every year with some of its students, in even the most depressed parts of the city. Why is success mot universal? Why is the failure rate so high? . . At the very heart of our problem is a national attitude that says that vocational education is designed for somebody else's children. This attitude is shared by businessmen, labor leaders, administrators, teachers, parents, and students. . . The attitude must change.

Jahoda (1966) believes that one of the problems faced in getting a clear picture of true attitudes is that there is a wide range of relationships between the attitudes and behaviors of a person. Studies cited elsewhere in this dissertation indicate that this is a problem in surveying

attitudes toward vocational education.

Chang (1971) found that some school personnel showed a positive attitude toward vocational education, but further investigation revealed that the positive attitude applied only to the "low status" student. This has been a major concern of vocational educators for many years.

The school administrator and school counselor are "authority figures" who may have some influence on changing the attitudes of students and assisting them in developing new values. According to Zaleznik (1964):

Values are ideas in the minds of men in that they specify how people should behave. Values also attach degrees of goodness to activities in some societies ministry and the professions are valued more highly than the business or trades activities. . . .

That this may be true in our society is supported by the First Annual Report of the National Advisory Council on Vocational Education (1968) which contains the following statement:

We have promoted the idea that the only good education is an education capped by four years of college. This idea transmitted by our values, our aspirations and our silent support, is snobbish, undemocratic and a revelation of why schools fail so many students.

San to the same that we was to be about the same the

Other statements in the report indicate that the Council believes that the Federal government should take the lead in bringing about a change in this national

attitude and that much of the change would need to come through the school systems. Changes were recommended for secondary and elementary curriculums.

The shaping of attitudes of students is the responsibility of many people. The administrators and counselors must certainly play a vital role in this. Hoyt (1970) believes "The school has a right to expect that the counselor will be vitally interested in the welfare of every student in the school." He further believes that school counselors and administrators should become familiar with the broad aspects of vocational education. They must be aware that a high percentage of their students will not obtain baccalaureate degrees. The bright student who is not interested in further academic work should be given an opportunity to develop a skill that he can use for satisfactory job entry.

Many vocational educators are aware that far too many of our secondary school students are receiving inadequate training. Venn (1967) says:

At the present time only one student in ten leaving the educational system without a bachelor's degree has some specific occupational preparation. This is only a small fraction of the real student potential for occupational preparation within the educational system.

This has become a strong indictment against the

educational system today. "Why can't Johnny read?" has now become "Why can't Johnny get a job?". This is a definite challenge to vocational and non-vocational educators.

Venn (1967) further states:

Educational doctrine declares that the schools must be responsive to the full range of student interest, aptitudes, and abilities, but often in practice all but the gifted and retarded are herded through the general academic curriculum.... Vocational schools are likely to be labeled "of lower quality," partly because of a perverted definition of quality.

Counseling and guidance are important aspects to all phases of education. However, the First Report of the Advisory Council to the Oklahoma State Board of Vocational Education (1969) has the following statement:

There are only four hundred and ten high school counselors in the secondary schools of Oklahoma and over fifty percent of the secondary schools have no counseling at all.

The report further indicated that the Council believed that high school youth needed help in choosing occupations and training to prepare for these occupations and that counselors could provide assistance in these areas.

Pritchard (1970), Zaleznik (1964), and others have indicated that attitude development and change is a complex procedure and that school authority figures cannot, in many instances effect great changes; however, they do play an important part in the shaping of students' attitudes. A

complete change of attitude will not come about in a short time because of authority figure influence or for any other reason. Career education programs must be developed early in a student's life. Many teachers, counselors, and administrators are ready to do so if they had the knowledge, teaching materials, and finances to carry out such a program. Mitchell (1971) states:

Most elementary teachers and school administrators would be willing to become better informed about career orientation if the opportunity was available . . . most school administrators would be willing to cooperate with elementary teachers in planning more effective career orientation. . . . Career orientation activities conducted in the elementary schools would strengthen vocational technical and practical arts programs at the secondary level.

This study, as well as others, indicates that one of the primary reasons that vocational education does not have a better image in our schools is because of lack of know-ledge concerning these programs. The commitment to better inform the public concerning vocational-technical education must become a true and dedicated commitment.

Openness of Personality

In any investigation concerning attitude formation and attitude change, the openness or closedness of personality must be considered.

This investigation presumed that most, if not all, of the students enrolling in the area vocational-technical school had been "exposed" to some image of vocational education. It seemed worthwhile to determine if there was a difference in attitude toward vocational education between the students scoring high on the dogmatism scale and those scoring low on the scale.

It has been pointed out by Newsome, Gentry, and Stephans (1965) that the closed minded individual is influenced very little by others in his attitudes or opinions, whereas, the open minded person is more flexible and tends to be more easily influenced by others. Pritchard (1970) states:

In an educational setting the closed personality will not readily accept the various stimuli that may be presented through classroom experiences.

In considering the many things that influence attitude formation and change, it is necessary to realize that students do relate to many different groups. Parents, peer groups, teachers, and administrators all play a vital role in attitude formation and change.

The degree to which attitudes of students can be affected may well depend upon the tendency of the students to open or closed mindedness. Rokeach (1960) declares:

Also, the more open the belief system, the more should the person be governed in his actions by

internal self-actualizing forces and the irrational inner forces.

The open minded person, therefore, is able to accept, analyze and synthesize information that he receives. This individual should, therefore, be more able to accept the "changing image" of vocational education if, in fact, this change is occurring.

This study would be incomplete without an extensive look at the image of vocational education.

The Image of Vocational Education

The image of vocational education, as perceived by the administrator and counselor in our public schools, has often been a negative one, particularly as applied to the student who is able to do academic work well. Too often it has been assumed that vocational education should be only for the student who cannot perform academic work well. Hoyt (1970) states that vocational educators must be aware of the reasons for this image and study ways that the image can be made positive. He lists several negative perceptions toward vocational education as perceived by high school counselors:

1. The first negative perception is one of vocational-technical educators trying to turn out skilled technicians, and craftsmen at the secondary level. This is contrary to what they have learned about vocational maturation.

- Vocational-technical education does not offer the student sufficient variety of choices.
- Vocational-technical educators do not wish to provide for "all students," but want to select their students.
- 4. Vocational-technical educators see their programs as separate from "regular" school, that is, they set themselves apart.

It is not difficult for a vocational educator to answer all of these negative perceptions. No vocational educator expects to turn out skilled craftsmen at the secondary level. They do expect to give students job-entry skills so that they can become a useful part of society if they decide not to take further training or education (Hoyt, 1970).

In the past it has been true that vocational-technical education did not offer the student sufficient choice of occupations. Because of lack of finances and low student enrollment, most schools were greatly limited as to the number of vocational programs that they could offer. The area school concept of Oklahoma, and similar other cooperative concepts in other states, is a giant stride toward solving this problem.

Vocational educators do want to provide training for all who want it, but they do resist being used as a "dumping ground" for the poor academic student, the problem

student, and other failures in the school system.

Vocational educators do want to be a part of the "regular" school program, in most instances, and it is the location of the facilities, as planned by the administrators, that often keeps them from being considered a regular part of the school system.

Vocational educators are committed to "providing training for all who want it and can benefit from it." There are fewer and fewer occupations in which the academic failure can become a success. This problem cannot be solved by willing it to go away. It must become a mutual problem for administrators, counselors, academic teachers, and vocational teachers. The common school in transition is faced with the cold, hard reality of facts: (a) some students do not stay in school through high school graduation, (b) more than half of those who are graduated attempt to enter the labor force immediately, (c) a large percentage of those who continue their education have occupational goals that can be satisfied in one or two years of additional study (Hoyt, 1970).

Previous studies have indicated that vocational education programs have a low status with the administrators and school counselors in many schools. Divita (1968), in a West Virginia study, found that vocational education had a

"low status" in many schools in West Virginia. Many of the administrators, principals, counselors, teachers, and students felt that vocational education was for the low intelligence student from "low status" families. He concluded that the improvement of existing programs and the educating of the public about vocational education would do much to remove the "low status" image of vocational education.

Divita (1968) further concluded that the success of vocational education programs in public schools largely depended upon the degree to which school administrators encouraged and supported such a program. This has rather serious implications in light of his findings that a high percentage of administrators and counselors had a rather negative perception of vocational education.

A similar study in Massachusetts (1969) found that junior high school staff members did not believe that vocational education was for the scholastically able students and that occupations for which vocational students were trained were not as prestigious as other employment alternatives. This study revealed that staff members had a positive feeling for vocational education for the "right kind" of student—the "right kind" of student being the scholastically unable student. This type of thinking has

encouraged many of our youth to take college preparatory courses when they had no desire to attend college. Many enroll in college and drop out during the first year.

Harris (1971) tells of an interview with her school counselor when she was a junior in high school. The counselor made the following statement:

I can't imagine it! How could an "A" student get involved in a vocational program? Now really, Lynn, what does Diversified Cooperative Training have to offer a student like you?

Similar views have been all too common in high schools in Oklahoma and in other states as well. Counselors and administrators, all too commonly, have been under the misconception that vocational programs should serve as "dumping grounds" for the poor academic student or the problem student. The author must concede a bias by feeling that vocational programs can help this type of student more than the academic program can, but vocational programs are also valuable for the better academic student as well. Keller (1965) states:

The only pupils whom the vocational high school can admit are those who apply. Those who apply are the ones who have earnestly, sincerely, and wisely determined that they want such training as is given in a vocational school, plus those who are told by counselors that they cannot and will not succeed in an academic high school (the slow, the reluctant, the delinquent, the nondescript). That the unfortunate, rejected pupils should be

sacrificed to this practice is indefensible.

That this same practice should be used by many to label vocational education as being only for the "low status" or "low academic" student is also indefensible. Too often administrators, counselors, and other school personnel never consider vocational education as being "suitable" for the student who can achieve in academic work (Keller, 1965).

Miller (1971) says that surveys taken at Oklahoma State

Tech show that a very small percentage of the students en
rolled there were referred to the school by the high school

counselor or school administrator. He believes that this

is a situation that needs to be corrected.

Spengler (1970) studied the attitudes of school board members toward occupational education in the state of New York. He found a significant difference in the attitudes of school board members toward occupational education and states:

It appeared that the measurement was a difference of degree of positive attitude rather than a difference in attitude toward occupational education and attitude toward other programs. It was apparent that school board members from urban school districts had a more positive attitude toward occupational education than school board members from city or rural school districts.

He believes that similar studies should be conducted involving chief school officers, guidance counselors, industrial personnel, and others.

Chang (1971) found that teachers from middle-class schools believed in high curricular emphasis programs with a rather small emphasis placed on skill training. He also found that teachers from lower-class schools believed that their schools should place a higher emphasis on skill training. He states:

It was evident from the study that the teachers believed that skill training was for the "low status" children with academic training the primary aim for the "higher status" children. Steps must be taken by school personnel to eliminate such discrepancies.

Vocational educators realize that vocational training is important to a high percentage of students enrolled in secondary schools. This realization must be transmitted to administrators, counselors, and other teachers in the public school systems.

The "low status" image of vocational education, in many schools, serves as a barrier to the student who can achieve in academic work, but who has a definite desire to pursue a career in vocational education. Most secondary school students place a high value on "status."

Klaurens (1970) reports that closer cooperation is needed between vocational teachers, counselors, and public school administrators. She states:

Counselor-education programs should include directed work exploration experiences in order that counselors are knowledgable of occupations, work environments, and the psycho-social dimensions of work.

Other studies support this belief that much of the negative image that counselors have toward vocational education is produced by the lack of knowledge of vocational education and the opportunities that it affords. Often it is not a negative image that vocational education has, but a "no" image. Attitudes and images are not formed concerning things of which one has no knowledge. This has too often been the case with vocational education in our secondary schools.

A recent editorial in the <u>Tulsa Sunday World</u> (1971) was titled, "New Priority in Education." The article quoted Sidney P. Marland, Jr., the U. S. Commissioner of Education. who stated:

Vocational training has become the No. 1 priority in education because of the increasing tight labor market for college graduates, particularly those in the Liberal Arts.

It is good news for vocational educators that the U. S. Commissioner of Education has given top priority to vocational education. However, this same editorial stated:

Educationists say despite the opportunities for vocationally trained students, there is still considerable prejudice against such training. The Council on Vocational Education states:

'at the very heart of our problem is a national attitude that says vocational education is for somebody else's children. We have promoted the idea that the only good education is an education capped by four years of college.'

This is the type of thinking that must be changed. All young people, as well as old, desire prestige and are hesitant to enroll in a type of training that has a "low status" image.

Shultz (1971), in an Oklahoma study concerning the image of vocational education, found that in general most people in the study area had a generally favorable attitude toward vocational education. He further found that the respondents to the study were in agreement that the quality of vocational education programs in Oklahoma was good. The main area of concern, however, was that a large percentage of the public was not knowledgeable enough concerning the adequacy of vocational education offerings available to students. He states:

The investigator has concluded that, in general, the public interviewed was uninformed about vocational education; however, their overall perception toward these programs would appear to be favorable.

This, perhaps, is one of the major problems facing vocational educators today. The public generally likes what they know about vocational education, but they do not know as much as they should. A major task, then, is to educate

the public concerning vocational education.

Is this negative image of vocational education changing? Shilt (1970) believes that it is. He states that the Vocational Education Amendments of 1968 are having a very positive effect in changing the image of vocational education. Some of the major changes that he lists that seem germane to this study are these:

- 1. There is a general awakening on the part of school superintendents and principals which recognize the potential of vocational education as an education process.
- 2. One of the most significant factors in the changing image of vocational education can be found in the type and amount of research being conducted in this field.
- 3. Guidance and counseling are taking on new and added responsibilities as vocational education moves toward serving more people at all levels and at all stages of development.

Robert Berg (1971) in an article headed "College Turns Out Plumbers, Mechanics," wrote of Ferris State College and the move toward vocational education in that college:

Only 30 per cent of the 9,200 students attending classes at Ferris State this Fall are going for a bachelor's degree. The remainder are working on one or two-year certificates in various courses. . . The entire student body is working in such fields of study as welding, automotive body repair, dental hygiene, or other vocational-technical skills.

This, as well as other similar articles, indicates that colleges are thinking of training to provide vocational-

technical training to those students who desire it. This is an encouraging picture.

Oklahoma Area Vocational-Technical Studies

Students who attend area vocational-technical schools do change in several ways. This was supported by Norris (1968) in a study of Southern Oklahoma area school students. He reports that:

Students who attend area schools participate in fewer extracurricular activities. . . . They show a marked improvement in social behavior at their home schools.

If these changes are apparent, then it is believed that other changes might occur; specifically, changes in the attitudes of students toward vocational education and the world of work. Vocational students need to take pride in what they are doing and not be "ashamed" of the plans that they have for the future. They, as much or more than anyone else, can help improve the image of vocational education.

Some studies have indicated that administrators, principals, and counselors are becoming more aware of vocational-technical education. They do need more knowledge of vocational education. Cronkite (1971) declares:

The Attitude Toward Vocational Education score of administrators could be influenced by vocational education courses for administrators and by improved sources of information for administrators.

This, then, must become top priority for vocational educators. If administrators, counselors, and principals desire more information about vocational education, then vocational educators must be prepared to provide it.

Does the attitude of administrators affect the area school student in any way? This investigator presumes that it does. This belief is supported by Cronkite (1971) who says:

The administrators' attitude toward vocational education claimed only 4.95 percent of the variation in the number of students who attended the vocational technical school, but this may be more important than it appears.

Summary

Large amounts of money are being spent on initiating and expanding vocational programs. One of the major problems that is being discovered is in reaching the students that should be reached. The National attitude toward vocational education needs to be changed.

Pritchard (1970) believes that authority figures do influence attitude and attitude change and that there is always a change agent present when attitudes change.

Studies by Chang (1971), Divita (1968), and others cited in this study indicate that vocational education has a relatively low image in many of our public schools today.

Many school personnel still consider vocational education as "low status" training.

Shift (1970) believes the image of vocational education is improving and cites recently enacted Federal legislation to support his belief. In an Oklahoma study by Shuftz (1971), individuals from five selected occupational categories generally had a positive image of vocational education, however, they were not knowledgeable concerning many aspects of vocational education.

Marland (1971) has stated that career education has become the number one priority for the U. S. Office of Education. He further stated that vocational educators must take the lead in promoting career education.

The area school concept in Oklahoma is a giant step toward providing vocational education to all who need it, want it, and can profit from it. School personnel, parents, and the public in general need more knowledge about vocational education in the area vocational-technical school.

From the literature surveyed, it would seem apparent that attitudes held by school officials and students may originate and develop from a variety of sources, including peers, educational attainment, information secured about the problem, the political and social climates, as well as many others.

It seems appropriate to close this summary with a statement contained in the Third Report of the National Advisory Council on Vocational Education:

The primary reason this nation has not yet established a society in which there is equal opportunity to learn and work is that it has not yet tried... What America needs most is a commitment to fulfill its most basic ideal. This nation was founded on a belief in the inherent worth of every individual. The fulfillment of individual potential is the country's historic mandate.

CMAPTER III

DESIGN AND METHODOLOGY

This chapter describes the population used for the study, the design of the study, and an explanation of the instruments used in measuring attitudes and open and closed mindedness. A discussion of the hypotheses tested and the statistical procedures used in testing the hypotheses is also found in this chapter.

The main purpose of this study was to determine if significant association existed between administrators' and/or counselors' attitudes toward vocational education and the General Learning Abilities, Skill Aptitudes and Attitudes

Toward Vocational Education of students from their school who are currently attending an area vocational-technical school.

Population

All of the participating schools in the Canadian Valley
Area Vocational-Technical School District were used in the
study with the exception of El Reno and Chickasha. El Reno

and Chickasha were not used because the Canadian Valley
Area School's two centers are located in these two cities.
Ten schools were used in the study--Amber-Pocasset, Alex,
Tuttle, Minco, Union City, Mustang, Calumet, Yukon, Piedmont, and Bethany.

All administrators and counselors of the participating schools were surveyed as to their attitudes toward vocational education (as measured by the ATVE Scale).

All students enrolled at the Area School for the first time were surveyed as to their attitudes toward vocational education (as measured by the ATVE Scale), their tendency to be open or closed minded (as measured by Rokeach's Scale, Form E), their general learning abilities, and their skill aptitudes (as measured by the GATB). The students were given the ATVE Scale at the start of the semester and again at the close of the semester.

Design

The design for this study was based on the premise that there are measurable differences in the attitudes of administrators and counselors. It was further surmised that there are measurable differences in attitudes, general learning abilities, and skills aptitudes between students enrolled in the Canadian Valley Area Vocational-Technical

School: Van Dalen (1966) states:

Before much progress can be made in solving problems, men must possess descriptions of the phenomena with which they work. Early developments in educational research, therefore, as in other disciplines, have been concerned with making accurate assessments of the incidence, distribution, and relationships of phenomena in the field.

This, then, has formed the basis for descriptive research.

Van Dalen (1966) further states that descriptive research

may be placed in three selected categories:

- 1. Survey studies
- 2. Interrelationship studies
- 3. Developmental studies

This study considered relationships that exist between the measured phenomena; it can then be considered a descriptive study of the interrelationship category.

Instruments Used

The investigator used two instruments in this study. One was an attitude toward vocational education scale developed at the University of Nebraska. This scale was developed by a research team, led by Mr. John Engler. Sixty-seven items were constructed and given summated ratings and then submitted to a panel of experts in the fields of test construction and vocational education to be analyzed for statements of ambiguity, double meaning, and

factual rather than attitudinal content. After revision the test was given to a pilot group, all of whom were administrators or were involved in administrative courses. Analyses of the data from the pilot group revealed that 36 of the items discriminated for attitudes toward vocational education at the .01 level and that ten additional items discriminated at the .05 level (see Appendix A).

The second instrument used was the Rokeach Dogmatism Scale, Form E (see Appendix B). In addition to these two instruments, information that had previously been recorded for the students' achievements in General Learning Ability and Skills Aptitudes as measured by the GATB (see Appendix C) was used in the study.

The ATVE test was administered to all administrators, counselors, and students selected for the study in September and October of 1971. The scale was also again administered to the students in January of 1972. The Rokeach Dogmatism Scale was administered to the students at the same time that the first ATVE test was given.

Rokeach (1960) indicates that "the Dogmatism Scale is a measure of the degree to which a person's total mind is an open or closed one." He believes that those who score high on this scale differ consistently from the ones who score low in the formation of new belief systems. A plus

four was added to students' scores on each question to eliminate minuses. The minimum possible score was 40 and the possible maximum was 280.

Hypotheses Tested

- 1. There is no significant difference between administrators as a group and counselors as a group in terms of attitudes held toward vocational education.
- 2. There is no significant difference between attitudes held by counselors as individuals and that of their chief school officers (administrators) as individuals in terms of attitudes held toward vocational education.
- 3. There is no significant difference in the attitudes of students from schools where administrators had a more positive attitude toward vocational education and those from schools where the administrator had a less positive attitude toward vocational education.
- 4. There is no significant difference in the attitudes of students from schools where counselors had a more positive attitude toward vocational education and those from schools where the counselors had a less positive attitude toward vocational education.
- 5. There is no significant difference in the general learning abilities of students from schools where the

administrator had a less positive attitude toward vocational education and those from schools where the administrator had a more positive attitude toward vocational education.

- 6. There is no significant difference in the general learning abilities of students from schools where the counselors had a less positive attitude toward vocational education and those from schools where the counselors had a more positive attitude toward vocational education.
- 7. There is no significant difference in the general skills aptitudes of students from schools where the administrator had a less positive attitude toward vocational education and those from schools where the administrator had a more positive attitude toward vocational education.
- 8. There is no significant difference in the general skills aptitudes of students from schools where the counselors had a less positive attitude toward vocational education and those from schools where the counselors had a more positive attitude toward vocational education.
- 9. There is no significant difference in the attitudes of beginning area school students, toward vocational
 education because of their measured tendency for open or
 closed mindedness.

TO: There is no significant change in students' attitudes toward vocational education after one semester of attendance at the Area Vocational-Technical School.

of attitude of students toward vocational education between students scoring above the mean on the Rokeach Dogmatism Scale and those scoring below the mean on the Scale.

Data secured in this study were considered suitable for analyzing by use of non-parametric statistical tests.

Popham (1967) states:

A non-parametric technique which may be used to test the difference between the distribution of one sample and some other hypothetical or known distribution is the chi-square test. This test can be used with data measured on nominal or stronger scales . . . then the chi-square test will yield a numerical value large enough to be interpreted as statistically significant.

Several of the hypotheses tested in this study were suitable for analyzing by use of this technique. Hypotheses numbers 3, 4, 5, 6, 7, 8, 9, and 11 were all tested by use of the chi-square technique. The basic computation equation used (Popham, 1967) was:

x² = Sum of (Observed frequencies - Expected Frequencies)²
Expected Frequencies

The administrators and counselors were ranked as above the mean of their group or below the mean of their group in regard to their attitude toward vocational education. A

£35 .

sample of the procedure is given below:

Administrators'	Students' GLA					
Attitude Toward Vocational Educ.	Above Me	the lan	Below Me	the an		ow <u> </u>
Above the Mean	sage y Posts o o	FE		FE	4.	
ADOVE THE MEST	FO		FO	1 (
Below the Mean		FE		FE		
•	FO		FO			
Column Sub-Total						:

Degrees of freedom were computed using (r-1) (c-1) (Popham, 1967). The expected frequencies were computed by the formula (Popham, 1967):

Row sub-total X column sub-total

The data were then checked at the .05 level of significance using appropriate chi-square tables. When the level of significance exceeded the .05 level, the appropriate level of significance was determined.

Hypothesis number 1 could not be tested using the chisquare technique. The Mann-Whitney U was selected as most
suitable for testing it. Runyon and Haber (1968) state:

The Mann-Whitney U-test is one of the most powerful nonparametric statistical tests, since, it utilizes most of the quantitative information that is inherent in the data.

Hypothesis number 2 was tested using the Spearman Rank Order: Runyon and Haber (1968) declare:

... Trho, or the rank correlation coefficient, is appropriate when one scale constitutes ordinal measurement and the remaining scale is either ordinal or higher.

Although the data from the ATVE Scale appears to be interval in form, this investigator did not feel that it could be considered true interval data.

Hypothesis number 10 was tested using the sign test (Siegal, 1956). The object of testing this hypothesis was to determine if there was a change in students' ATVE scores after one semester at the vocational-technical school and the direction of the change.

The investigator realized that the use of several types of statistical methods in one study is not too desirable, however, in order to give a more complete picture of attitudes, attitude influences, and relationships between students and administrators and counselors, it was deemed necessary to use all.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

The results of this study are presented in five sections with a summary and general discussion of the results at the end of the chapter. The first section deals with the attitudes of administrators and counselors toward vocational education and the relationship of these attitudes. The Spearman Rank Order correlation coefficient was used to determine the relationship between administrators' and counselors' attitudes in the same school; and the Mann-Whitney U was used to determine if administrators, as a group, and counselors, as a group, differed in their attitudes toward vocational education.

The second section deals with the relationship of the attitudes of administrators and counselors toward vocational education to that of the attitudes of students from their schools toward vocational education. The Attitude Toward Vocational Education Scale, developed at the University of Nebraska (see Appendix A), was administered to all involved. Chi-square was used to determine differences with the

groups divided as scoring above the mean or below the mean for their respective group. Exactly 50 per cent of the administrators scored above the mean and 50 per cent of the counselors also scored above the mean for their respective group. Considering the students enrolled in the Area Vocational-Technical School for the first time, 94 scored above the mean and 115 scored below. Also considered in this section is the above relationships when either the administrator or counselor scored above the mean and the other, from the same school, scored below the mean. A more complete discussion of the procedures used will be given in the second section.

The third section considers the relationship of the attitudes of administrators and counselors toward vocational education to the General Learning Ability scores as measured by the GATB (see Appendix C) of the students from their school who are enrolled for the first time in the Canadian Valley Area Vocational-Technical School.

The fourth section attempts to determine the relationship of the attitudes of administrators and counselors toward vocational education to the skills aptitudes of the
students from their school who are enrolled for the first
time in the Area Vocational-Technical School. Passing or
failing the GATB (see Appendix C) pattern for the course

of study pursued was the determining factor considered.

The fifth section evaluates the relationship of the first-year Area Vocational-Technical students' scores on the ATVE Scale to their scores on the Rokeach Dogmatism Scale. This section also examines the change of attitude toward vocational education after one semester at the Area Vocational-Technical School.

The chapter closes with a summary and general discussion of the results.

Relationship Between the Attitudes of Administrators
and Counselors Toward Vocational Education

Hypothesis No. 1:

There is no significant difference between the attitudes of administrators and counselors to-ward vocational education.

The ATVE Scale was administered to each of the school administrators and counselors of the participating schools in the Canadian Valley Area Vocational-Technical school district. As previously indicated, the two participating schools located in cities which have the Canadian Valley Area Vocational-Technical centers were not used. The following schools were used in the study: Alex, Amber-Pocassett, Bethany, Calumet, Minco, Mustang, Piedmont, Tuttle, Union City, and Yukon. The administrators had

scores ranging from 129 to 163 with a mean of 143.2 while counselors' scores ranged from 115 to 160 with a mean of 138.7. The Mann-Whitney U was used to test the hypothesis. This tabulation follows:

Mann-Whitney U Tabulation

163-160-157-156-152-148-147-145-143-140-139-138-135-134-133-A C A C A A C A C C A C A A C

> 132-129-128-127-115 A A C C C

U = 39--not significant at the .05 level. The null hypothesis was considered tenable (see Table 12, Appendix D).

Although the mean of the administrators was slightly higher than that of the counselors and three of the counselors scored the lowest of the combined groups, there was no indicated tendency for one group to score higher than the other. The means of 143.2 and 138.7 are similar to those found by Cronkite (1971) in a study involving 24 superintendents of schools in an area vocational-technical school service area. His study revealed a mean of 137.88 for the superintendents.

Hypothesis No. 2:

There is no significant difference in the attitudes of counselors and that of their chief school officer (administrator) toward vocational education.

The major purpose in testing this hypothesis was to determine if the attitudes of the administrator and counselor of the same school related to each other. It is

understood that strong leadership on the part of the administrator could definitely be a factor in this relationship. A clear statement of purpose of the school by the administration could also be very important. In some instances the counselor, and other school personnel, are not aware of how the administrator truthfully feels about vocational education. In this instance public opinion, or at least the counselors' perceived idea of public opinion, may have a greater influence on his attitude toward vocational education. At least two of the counselors considered in the study had spent some time visiting the vocational-technical school and were well aware of the course offerings, the requirements for success in the various courses and the general operation of the vocational-technical school. These visits may have influenced the counselors' attitude more than did the attitude of the administrator. It is well to consider here the fact that all school personnel need to be informed of the opportunities available in vocational-technical education. It is sometimes difficult to assess who in the school may have the greatest influence on the students' acceptance or rejection of vocational education.

The Spearman Rank Order coefficient was used to test hypothesis number two and tabulations for this rank order

are as follows:

	Spearman	Rank Ore	der Tabulation	1		
School Number	Administrators' ATVE Score	Rank	Counselors' ATVE Score	Rank	D	D ²
1	⊶ 163	1	156	2-	1	1
esikaet ia e 2	157	2	140	5	3	9
3	152	. 3	147	3	0	0
4	147	4	128	8	4	16
5	145	 5	143	4	1	1
6	138	6	160	1	5	25
7	135	7	133	7	o	o
8	134	8	127	9	1	1
9	132	9	138	6	3	9
10	129	10	115	10	0	0

 r rho = .6248

The significance level at .05 for ten pairs is .648, therefore, this data would not be significant at the .05 level. The significance level for ten pairs at the .10 level is .564; this data would, then, be significant at the .10 level.

Both the .05 significance level and the .10 significance level are shown to indicate that there does appear to be a definite relationship in a majority of the schools. Six of the schools had a difference of one or less. As will be shown in results further in the study, of the five

schools where the administrator scored above the mean for his group, four of these schools had counselors scoring above the mean for his group. There is no attempt here to show a cause and effect relationship as there could be many intervening variables, however, there does appear to be a strong relationship in many instances.

It seems appropriate to point out that personal interviews with administrators and counselors, and the results of the Attitudes Toward Vocational Education Scale did not reveal any generally negative attitudes toward vocational education. There was, however, a degree which would indicate a more positive and a less positive attitude toward vocational education in the schools studied. Cronkite (1971) discovered similar results in a study of another area school district in Oklahoma using the same scale. He states, "Many administrators who had no vocational education background did not understand the vocational education 'jargon'."

Attitudes of Administrators and Counselors
as Related to Attitudes of Students

This section examines the possible relationship that may exist between the attitudes of administrators and counselors toward vocational education to that of the

attitudes of students from their respective schools who were enrolled in the area school for the first time. The authority figure can play an important part in the development of attitudes. There are many other variables that may have influenced the attitudes of the students, however, this study sought only to discover if there was a significant difference in the attitudes of students toward vocational education from schools where the administrator and/or counselor scored above the mean for their respective groups and the students from schools where the administrator and/or counselor scored below the mean for their respective groups.

As was discussed in the review of literature, the formation of attitudes is a nebulous thing and it is extremely difficult to determine all of the factors that influence the attitudes of anyone. Often a single spoken phrase such as "those students" when referring to vocational students, may have a lasting effect on attitude formation. Many times administrators or counselors may inadvertently cause students to develop negative attitudes toward vocational education. An overworked cliche still used in too many of our schools is, "You make A's and have an IQ of over 110; you are college material so take courses that will prepare you for college." As vocational educators, we must erase the image that "good" students with high IQ's should not be

in vocational training programs. This researcher maintains that the United States can use many "bright" mechanics, plumbers, electricians, or others in our so-called skill trades. A student's IQ should not automatically place him in any particular type of program.

Hypothesis No. 3:

There is no significant difference in the attitudes of students from schools where the administrator had a more positive attitude toward vocational education and those from schools where the administrator had a less positive attitude toward vocational education.

This hypothesis was tested using the following procedure: All students enrolling in the Canadian Valley
Vocational-Technical School for the first time were given
the Attitude Toward Vocational Education Scale. Although
there was some misunderstanding among the students concerning the questions, "spot check" interviews with students
revealed that the Scale was effective in determining the
students' attitude toward vocational education. The mean
of the entire group was determined. Ninety-four students
scored above the mean and one hundred fifteen scored below
the mean. Table I lists the results of this investigation.

TABLE I

RELATIONSHIP HENTEN ADMINISTRATORS LAND STUDENTS ATVE SCORES

Administrators	Student		
Administrators' Scores	No. Above Mean	No. Below Mean	Totals
Above Mean	67	44	111
Below Mean	27	71	98
Totals	- 9 4	115	209

 $x^2 = 26.70$; df = 1; significant beyond the .001 level. The null hypothesis was rejected.

An analysis of the data indicates that there was a significant difference in the ATVE scores of students from schools where the administrator scored above the mean on the ATVE Scale and of students from schools where the administrator scored below the mean on the ATVE Scale. An examination of the data reveals that a higher percentage of the students scored above the mean on the ATVE Scale in the schools where the administrator also scored above the mean. There is no attempt here to show a cause and effect; the attempt was to determine whether there was a relationship between the students' ATVE Scale scores and that of the administrator from the students' home school.

Hypothesis No. 4:

There is no significant difference in the attitude of students from schools where counselors had a more positive attitude toward vocational education and those from schools where the counselors had a less positive attitude toward vocational education.

A comparison of the relationship between counselors' ATVE scores and ATVE scores of students from their schools revealed results similar to those obtained from hypothesis number three. Only two schools changed places in the chart. In one of these schools the administrator scored above the mean while the counselor scored below the mean; in the other school, the administrator scored below the mean while the counselor scored above. The comparisons of the counselors' scores and the scores of the students from their school are given in Table II below:

elationship between			ATVE SCO
Counselors'	Students	Students' Scores	
Scores	Above the Mean	Below the Mean	Totals
Above Mean	67	43	110
Below Mean	27	72	99

 $X^2 = 22.41$; df = 1; significant beyond the .001 level The null hypothesis was not tenable

A comparison of Table I and Table II reveals that there was very little difference brought about by the shift of the two schools. The two schools had almost the same number enrolled in the area vocational-technical school and the students from the schools were divided almost identically in regards to ATVE scores.

As this study was concerned with both the relationship of administrators' and counselors' ATVE scores to that of the students from their schools, it was felt that a composite table might be more revealing than a separate table. Table III, therefore, examines the relationships that exist when both the administrator and counselor scored above the mean, either the administrator or counselor scored above the mean and the other scored below the mean, and when both the administrator and the counselor scored below the mean. The Spearman Rank Order correlation coefficient in section one of this chapter indicated that there was a degree of relationship between the attitudes of the administrator toward vocational education and the attitudes of the counselor from the same school. Table III shows a composite result of the attitude relationship between administrator and counselor and the students from their schools.

TABLE III
RELATIONSHIP OF ATVE SCORES

Administrators' and	Students		
Counselors' Scores	Above the Mean	Below the Mean	Totals
*Plus Plus	59	36	95
**Plus Minus	16	15	31
***Minus Minus	· 19	64	83
Totals	94		209

 $X^2 = 28.2$; df = 2; significant beyond the .001 level

*Administrator and counselor scoring above the mean **Either administrator or counselor scoring above the mean, with the other scoring below the mean ***Administrator and counselor scoring below the mean

An examination of the data in Table III yields some interesting information. Over 62 per cent of the students from schools where both the administrator and counselor scored above the mean on the ATVE also scored above the mean on the ATVE Scale. Students from the schools where either the administrator or counselor scored above the mean and the other below the mean were almost equally divided above and below the mean, but less than 23 per cent of the students from schools where both the administrator and counselor scored below the mean scored above the mean.

The results in Tables I, II, and III would indicate that there is a relationship between the ATVE scores of administrators and counselors and the ATVE scores of

students from their schools. The variables involved that could produce these relationships are many. Community attitude, ethnic groups, and distance from the area vocational-technical school are only a few. There could be many more, however, there are some implications revealed that should be of importance to the vocational educator.

Attitudes of Administrators and Counselors as Related to

General Learning Ability of Students Enrolled in

the Area Vocational-Technical School

All of the students in the study had previously been given the GATB (see Appendix C) or were given it during September of 1971. The scores were tabulated by schools to determine if there was a relationship between the general learning abilities of students and the scores of administrators and/or counselors on the ATVE Scale.

Several studies previously discussed in this dissertation have indicated that many administrators and counselors have very positive attitudes toward vocational education for the low achiever, but are much less enthusiastic regarding vocational education for the high achiever. This type of attitude is reflected in lower scores on the ATVE Scale. It was deemed germane to this investigation to determine if there was a difference in the ratio of high

General Learning Ability students to low General Learning
Ability students from different participating schools, and
if there was a difference, did it relate to the ATVE scores
of administrators and/or counselors from these schools.

Two hypotheses were tested to determine this.

Hypothesis No. 5:

There is no significant difference in the general learning abilities of students from schools where the administrator had a less positive attitude toward vocational education and those from schools where the administrator had a more positive attitude toward vocational education.

This hypothesis was tested using chi-square techniques. The students were divided as those scoring above the mean and those scoring below the mean on the General Learning Ability section of the GATB Test. The mean GLA score for all students was 96.82.

The schools were divided as those having administrators who scored above the mean on the ATVE Scale and those having administrators who scored below the mean.

TABLE IV
STUDENTS'GLA SCORES AS RELATED TO ADMINISTRATORS' ATVE SCORES

A Jack and a transfer and a	Students' Scores			
Administrators' ATVE Scores	Above the Mean	Below the Mean	Totals	
Above Mean	70	41	111	
Below Mean	34	64	98	
Tetals	104	105	209	

x² = 15.80; df = 1; significant beyond the .001 level The null hypothesis was rejected

Analyses of Table IV reveal several interesting facts. The test, as a fair measure of what it is trying to measure, appears to be satisfactory with 105 students scoring below the mean and 104 scoring above. Students from schools having administrators who scored above the mean on the ATVE Scale definitely showed higher GLA scores than students from schools where the administrator scored below the mean.

Another authority figure in the public schools who should have an influence on the number and abilities of students enrolling in the area vocational-technical school is the school counselor. Other studies have indicated that many of our school counselors are definitely academically orientated. The students who have relatively high GLA scores are encouraged to take college preparatory courses and not to take vocational courses. The range of counselors' scores on the ATVE test in this study would seem to

indicate that there is a rather wide variance in the vocational orientation and acceptance between schools considered in the study. This study attempted to determine if there was a relationship between students' GLA scores and the ATVE scores of the counselor from their school.

Hypothesis No. 6:

There is no significant difference in the general learning abilities of students from schools where the counselors had a less positive attitude toward vocational education and those from schools where the counselors had a more positive attitude toward vocational education.

The following table depicts the relationship between counselors' scores on the ATVE Scale and the GLA scores of students from their school who were enrolled in the Area Vocational-Technical School. It is realized that this could be only one of many variables that determine occupational choice.

STUDENTS' GLA SCORES AS RELATED TO COUNSELORS' ATVE SCORES

Counselors' ATVE Scores	Students' Above the Mean	GLA Scores Below the	Totals
Above Mean	63	47	110
Below Mean	41	58	99
Totals	194	105	209

X² = 4.66; df = 1; significant at the .05 level
The null hypothesis was rejected

Although the results were not as striking as those obtained for the administrators, it was still apparent that there was a relationship between the counselors who scored above the mean and the percentage of students from their schools who scored high on the GLA as compared to students from schools where the counselor scored below the mean.

The following table depicts the study concerned with two authority figures in the school and the possible relationship of their ATVE scores to several characteristics of the students from their schools who enrolled in the vocational-technical school (the preceding two tables considered only one of these figures in each table). It was considered important to determine what relationships would be apparent when the ATVE scores of both the counselor and administrator were considered.

TABLE VI
STUDENTS' GLA SCORES AS RELATED TO ADMINISTRATORS'
AND COUNSELORS' ATVE SCORES

Administrators'	Students'		
ATVE Scores	Above the Mean	Below the Mean	Totals
*Plus Plus	59 36		95
**Plus Minus	15	16	31
***Minus Minus	30	-53	83
Totals	104	105	209

 $X^2 = 11.93$; df = 2; significant at the .02 level

*Administrator and counselor scoring above the mean **Either administrator or counselor scoring above the mean with the other scoring below the mean ***Administrator and counselor scoring below the mean

An analysis of the data indicates a definite relationship between the ATVE scores of the administrators and
counselors and the GLA of students from their school who
were enrolled in the Canadian Valley Area VocationalTechnical School. It is interesting to note that in instances where either the administrator or counselor scored
above the mean on the ATVE Scale and the other below the
mean, the students from their schools were almost evenly
divided as above and below the mean on the GLA section of
the GATB.

Attitudes of Administrators and Counselors as Related to Skills Aptitudes of Students Enrolled in the Area Vocational-Technical School

In addition to general learning ability, the GATB (see Appendix C) measures eight other abilities. Minimum scores in various abilities are considered essential for success in various occupations. A pattern has been established for each of the many occupations for which the GATB tests. The Canadian Valley Area Vocational-Technical School personnel, using the GATB data, have established patterns to determine probable success in the programs offered at the two centers.

Students are encouraged by both area school counselors and home school personnel to select only programs of study for which appropriate pattern achievements have been met.

In some of the schools, local school personnel take a sincere interest in this procedure while in others, it is considered the responsibility of the area school counselor only.

This section of the study sought to determine if there was a relationship between the participating school administrators' and/or counselors' ATVE score and the number of students from their schools who enrolled in programs for which they had "passed the pattern."

Hypothesis No. 7:

There is no significant difference in the general skills aptitudes of students from schools where the administrator had a less positive attitude toward vocational education and those from schools where the administrator had a more positive attitude toward vocational education.

The administrators were ranked as scoring above or below the mean and the students were categorized as having
passed or failed the pattern for the program in which they
were enrolled. The results are listed in Table VII:

TABLE VII

STUDENTS* OCCUPATIONAL PATTERN SCORES AS RELATED
TO ADMINISTRATORS! ATVE SCORES

Administrators'	Students' C Pattern	Students' Occupational Pattern Scores		
ATVE Scores	Passed	Failed	Totals	
Above Mean	101	10	111	
Below Mean	63	35	98	
Totals	164	45	209	

 $X^2 = 20.71$; df = 1; significant beyond the .001 level The null hypothesis was rejected

An analysis of the data in Table VII reveals that there was a relationship between the administrators' ATVE scores and the number of students from their schools who passed the pattern for the vocational-technical course in which they were enrolled. Also apparent is the fact that a higher percentage of students passing the pattern were from schools where the administrator scored above the mean on the ATVE Scale. This investigator does not presume to see

cause and effect in these results, but merely to show the relationships that do exist.

The counselors in the participating schools also have opportunity to influence the vocational-technical choices of students from their schools. The same procedure as used for administrators was followed for counselors.

Hypothesis No. 88

There is no significant difference in the general skills aptitudes of students from schools where the counselors had a less positive attitude toward vocational education and those from schools where the counselor had a more positive attitude toward vocational education.

The results are shown in Table VIII:

STUDENTS' OCCUPATIONAL PATTERN SCORES AS RELATED
TO COUNSELORS' ATVE SCORES

TABLE VIII

Counselors'	Students' C Pattern	ecupational Scores	600 m. do no 12 m
ATVE Scores	Passed	Failed	Totals
Above Mean	93	17	110
Below Mean	71	28	99
Totals	164	45	209

 $X^2 = 4.35$; df = 1; significant beyond the .05 level The null hypothesis was rejected

An analysis of this data reveals that there is a relationship between the participating counselors' ATVE scores and the number of students from their school who enrolled in programs for which they had passed the occupational pattern.

The administrators and counselors, as authority figures, may influence students' decisions. If there is a difference of attitudes between these two individuals, this also could affect students' decisions. To determine the possible relationships of both of the above individuals on students' choices, it was deemed advisable to study three possible categories. The students were listed as coming from schools where both the administrator and counselor scored above the mean on the ATVE Scale, where either the administrator or counselor scored above the mean and the other below, and where both the administrator and counselor scored below the mean. These results are listed in Table IX:

STUDENTS' OCCUPATIONAL PATTERN SCORES AS RELATED TO ADMINISTRATORS' AND COUNSELORS' ATVE SCORES

TABLE IX

Administrators; and Counselors; ATVE Scores	Students' Od Pattern	Students' Occupational Pattern Scores			
ATVE Scores	Passed	Failed	Totals		
*Plus Plus	86	9	95		
**Plus Minus	22	9	31		
***Minus Minus	56	27	83		
Totals	164	45	209		
$X^2 = 15.53$; df =	= l; significa	nt beyond the	.001 level		

^{*}Administrator and counselor scoring above the mean **Either administrator or counselor scoring above the

This data reveals substantially the same information as Table VII and Table VIII.

mean with the other scoring below the mean ***Administrator and counselor scoring below the mean

It is recognized that many other variables may have produced these results, however, the fact that the relationship does exist is a cause for concern. Vocational educators strive for a high percentage of successful completions, therefore, it is imperative that students pursue programs in which they have a good chance for success. Although the validity of the GATB as an indicator for success in area school programs in Oklahoma has not been tested, it must be assumed that it does at least provide some guidelines to follow in student program selection.

Open Mindedness and Closed Mindedness and Student Attitudes

Open mindedness and closed mindedness refers to the general structure of an individual's belief system. The instrument used to obtain the data of this study was the Dogmatism Scale, Form E, developed by Rokeach (see Appendix B).

Open minded, as considered in this study, is applied to individuals scoring below the mean on the Dogmatism Scale; closed mindedness refers to those individuals scoring above the mean on the same scale.

In this investigation the range of all scores achieved by Area Vocational-Technical students was 84 to 239 with a

mean of 173.3. Wiggins (1968) reported that a group of 75 student teachers in agricultural education at Oklahoma State University examined in 1968 had a range of 106 to 204 with a mean of 159.9189. Pritchard (1970) shows that 32 beginning teachers of vocational agriculture tested in 1970 had a range of 114 to 221 with a mean of 158.56.

This part of the study sought to determine if there was a relationship between students' dogmatism scores and their ATVE scores. An attempt was also made to determine if attitude change could be related to dogmatism scores. The results of this investigation revealed that 104 students in the study scored above the mean while 105 scored below the mean.

Hypothesis No. 9:

There is no significant difference in the attitudes of beginning area school students toward vocational education because of their measured tendency for open or closed mindedness.

Students were ranked as scoring above or below the mean on the dogmatism scale and also as scoring above or below the mean on the ATVE Scale. Chi-square values were computed. These results are shown in Table X:

TABLE X

STUDENTS' ATVE SCORE	S AS RELATED	TO THEIR DOGMA	rism scores
Students' Dog- matism Scores	Students' Above the	ATVE Scores Below the Mean	Totals
Above Mean	34	70	104
Below Mean	60	45	105
Totals	94	115	209

 $X^2 = 12.66$; df = 1; significant beyond the .001 level The null hypothesis was not tenable

An analysis of the data presented above reveals that there was a relationship between students' dogmatism scores and students' ATVE scores. Students scoring below the mean, considered in this study as open minded, scored higher on the ATVE Scale than did students scoring above the mean on the dogmatism scale.

Do students' attitudes toward vocational education change after one semester at the vocational-technical school? If so, what is the direction of the change? This portion of the study sought to answer these questions. Ten schools were used in the entire study, however, students from two of the schools attended a different vocational-technical center than did students from the other eight schools. In an attempt to determine if attendance produced a change in the students' attitudes, only students from the eight schools who attended the same center were used. This

eliminated the variable of different orientations that might exist between the two centers.

One hundred and seventy-three students were again given the ATVE Scale at the end of their first semester at the vocational-technical school at El Reno. One hundred and twenty-seven had higher scores on the ATVE Scale at the completion of one semester at the school while 40 had lower and six remained the same.

Hypothesis No. 10:

There is no significant change in students' attitudes, as measured on the ATVE Scale, after one semester of attendance at the Area Vocational School.

The basic sign test formula was used to test this hypothesis (Siegel, 1956):

$$z = \frac{(x - .5) - \frac{1}{2}(N)}{\frac{1}{2}N}$$

$$z = \frac{(127 - .5) - \frac{1}{2}(167)}{\frac{1}{2}(167)}$$

$$z = 6.65$$

This is significant beyond the .001 level, therefore, the null hypothesis was rejected.

An analysis of the data revealed that the direction of change was toward a more favorable attitude toward vocational education after one semester at the vocational-technical school. At least a part of this change can be

attributed to an increase in knowledge about vocational education.

Since the results of this portion of the study indicated that there was a change in students' attitudes toward vocational education after one semester at the vocational-technical school, it was deemed important to investigate the possibility that a student's measured tendency toward open or closed mindedness might be related to the change. The mean ATVE score of the 173 students considered in this phase of the study was 123.26 at the beginning of the semester and 130.63 at the end of the semester. To determine if there was a relationship between the attitude change and the student's dogmatism score, Hypothesis No. 11 was developed and tested. This data is presented in Table XI. Hypothesis No. 11:

There is no significant difference in the change of attitude of students toward vocational education between students scoring above the mean on the Rokeach Dogmatism Scale and those scoring below the mean.

To test this hypothesis, the mean net increase in ATVE scores by all students was computed. This mean net increase in ATVE scores was 6.37. Students were divided as having scores that increased more or less than the mean increase.

TABLE XI
STUDENTS' CHANGE IN ATTITUDE TOWARD VOCATIONAL EDUCATION
AS RELATED TO THEIR DOGMATISM SCORES

Dogmotion	Net Increase		
Dogmatism Scores	Above the Mean	Below the Mean	Totals
Above Mean	35	46	81
Below Mean	50	42	92
Totals	85	88	173

 $X^2 = 2.73$; df = 1; not significant at the .05 level The null hypothesis is accepted

An analysis of this data reveals that there was slightly more change by the students scoring below the mean on the dogmatism scale than those scoring above the mean, however, there was not a statistically significant difference. Students scoring above the mean on the dogmatism scale had mean scores on the ATVE Scale of 120.15 and 126.04, respectively, at the beginning and end of one semester at the vocational-technical school while students scoring below the mean on the dogmatism scale had mean ATVE scores of 128.41 and 135.19 respectively at the beginning and end of one semester at the school.

Chapter Summary

An analysis of the data collected for this study revealed that there was a difference between the attitudes of administrators and counselors toward vocational education

as measured by an ATVE Scale. There was a relationship between the ATVE scores of administrators and counselors and the general learning ability and skills aptitudes of students from their schools enrolled in the Canadian Valley Area Vocational-Technical School. No attempt was made to establish whether there was a cause and effect between the factors analyzed.

There was also a relationship between the students' dogmatism scores and their ATVE scores. There was no significant relationship found between the students' dogmatism scores and their change in attitude toward vocational education after one semester at the vocational-technical school. Although the open minded students (ones scoring below the mean on the dogmatism scale) had a mean increase in ATVE scores that was slightly higher than the closed minded students, the increase was not statistically significant.

The results of this study appear to have some implications that should be of interest to vocational-technical educators, particularly those in area vocational-technical schools in Oklahoma.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study considered the possible relationship of attitudes of administrators and counselors, or persons serving as counselors, to several student variables. The area studied was the Canadian Valley Area Vocational-Technical School District with centers at El Reno and Chickasha, Oklahoma. Ten participating schools were studied. El Reno and Chickasha independent school districts were not studied in order to eliminate the possibility of bias since the two vocational-technical centers are located in these two cities.

Data were collected from each of the ten schools and also from the students from these schools who were enrolled for the first time in the Area Vocational-Technical School. Second-year students were not included in the study because of the possible influence of the Area Vocational-Technical School program on the students' attitudes toward vocational education.

It was persumed that the administrator's and counselor's attitude toward vocational education would be related to the attitudes of students and would also have a relationship to the type of student from their school who chose to enroll in the Area Vocational-Technical School. Cronkite stated that his study

. . . demonstrated that the school's administrator did have influence on the number of students who attended the area vocational school; however, the influence was not as significant as had been anticipated. (Cronkite, 1971)

The administrators' ATVE scores ranged from 129 to 163 with a mean of 143.2. Five administrators scored above the mean and five below. The counselors' ATVE scores ranged from 115 to 160 with a mean of 138.7. Five of the counselors scored above the mean and five scored below. In four of the schools where the administrator scored above the mean, the counselor also scored above the mean. Statistical tests revealed that there was no significant difference in attitude toward vocational education between the administrators and counselors. They also revealed that in most of the schools, the counselor and the administrator tended to have similar attitudes toward vocational education.

This tendency was not significant at the .05 level, but was significant at the .10 level.

An analysis of the data indicated that students from schools where the administrators and counselors scored high on the ATVE Scale also scored higher on the Scale than did students from schools where the administrators and counselors scored low. This would seem to indicate that the administrator and counselor, as authority figures, do influence student attitudes toward vocational education. It is realized that there may be many other variables responsible for this relationship and recommendations for further study to explore these will be made later in this chapter.

Do area school students with higher General Learning Ability scores tend to be from participating schools having an administrator and/or coumselor exhibiting more favorable attitudes toward vocational education? Results of this study would seem to so indicate. Students are very conscious of peer-group evaluation and students with high academic ability tend to ignore vocational offerings if the general attitude of their school personnel is that vocational education is only for the academically weak student. In many instances, perhaps, school authority figures are not conscious of the fact that they project a rather negative image of vocational education to students. Such a simple statement as, "You are a very good student, you should go to college," can leave the impression that good

students should not take vocational courses. Similarly, students with high skills aptitudes tended to come from schools where the administrator and counselor had more positive attitudes toward vocational education.

Students who scored above the mean on the Rokeach Dogmatism Scale, considered as closed minded in this study,
tended to score lower on the ATVE Scale than did students
who scored below the mean. The interest and importance of
vocational education that has been apparent since the
passage of the 1968 Amendments has perhaps caused the open
minded student to do some personal serious evaluation of
vocational education. This study, as well as interviews
with some of the students, clearly indicated that a large
number of students are thinking of their future and are
weighing the advantages and disadvantages of vocational
training. Vocational educators must take immediate steps
to insure that students will get the information that they
are seeking regarding the importance of vocational education in their future.

Another interesting finding of this study was that students' attitudes toward vocational education do become more positive after one semester in the area vocational-technical school. It is believed that most of this change occurs because of increased knowledge about vocational

education and also the quality of the vocational training that the student receives at the area vocational-technical school.

Conclusions

This study has provided information that should be helpful in other similar studies. It is hoped that the results will stimulate additional studies in area vocational-technical schools throughout the state.

It was apparent that few, if any, of the administrators or counselors studied exhibited clearly unfavorable attitudes toward vocational education, however, there was revealed a variation which could be appropriately classified as less positive and more positive. Many of the less favorable perceptions of school personnel toward vocational education can, perhaps, be attributed to a possible lack of knowledge about vocational education and more specifically the proper place of the area vocational-technical school in the overall school program. It was of considerable interest to the investigator to observe that the two counselors who spent at least one day in the area school becoming familiar with the goals and objectives of the school scored the highest of all counselors responding to the ATVE Scale.

The ATVE Scale appears to be a satisfactory instrument for measuring attitudes toward vocational education, however, an individual's score on the Scale may reflect his knowledge of vocational education, to a certain degree, as well as his attitude. There are implications for vocational educators in either instance, however, in the results of this study. Literature reviewed for this investigation revealed that administrators and counselors want and need more information concerning vocational education.

Area school students' abilities and attitudes toward vocational education do relate to their home school administrator's and/or counselor's attitude toward vocational education.

It is to be clearly understood that variables other than those tested could be involved in producing the results that were obtained in this study. However, the results can be used as a basis for further study to assist in solving some of the problems of vocational education.

Studies such as those by Chang (1971), Divita (1968), and other sources listed in the review of literature clearly indicate that school personnel do have varying attitudes toward vocational education and that often a positive attitude toward vocational education is positive only for the "right kind" of student--the low academic one.

It appears that the results of this study could have some implications for vocational educators.

Implications of the Study

- 1. Further exploration of the feasibility of providing in-service courses for administrators, counselors, and other school personnel to assist these individuals in obtaining more knowledge concerning the function and purpose of vocational education.
- 2. Efforts should be made to provide school administrators and counselors knowledge of developing concepts of vocational education. This recommendation is prompted by the associations identified in this study and the potential for changed attitudes accompanying the acquisition of additional knowledge.
- 3. State and district vocational-technical personnel should give careful attention to the need for increased communication with local school administrators and counselors.

Recommendations for Further Study

- 1. Similar studies should be conducted to determine attitudes of parents, teachers, other school personnel, and board members concerning vocational education.
- 2. The GATB is used extensively by Oklahoma area vocational-technical schools. Studies should be conducted to determine if this test is an appropriate measure for probable success in area school programs.
- Other variables should be determined and studied concerning student attitudes toward vocational education.
- 4. Other variables should be determined and studied concerning student enrollment in an area vocational-technical school.

- 5. This study should be replicated in other geographic areas to determine if similar conditions exist in other area vocational-technical school districts.
- 6. Studies should be conducted to compare the attitudes toward vocational education of area school students to that of their classmates who do not elect to enroll in the area school.

A SELECTED BIBLIOGRAPHY

- Attitudes of Junior High School Staff Members Toward Vocational Education, Massachusetts Vocational Education Research Coordinating Unit, November, 1969.
- Arnold, Joseph P. A Seminar on Graduate Education Programs. Columbus: Ohio State University, 1969.
- Barlow, Melvin. <u>Vocational Education</u>. The Sixty-fourth
 Yearbook of the National Society for the Study of Education. Chicago: The University of Chicago Press,
 1965.
 - Berg, Robert. "College Turns out Plumbers, Mechanics,"

 <u>Tulsa Daily World</u>, November 14, 1971.
 - Chang, Sunnyuh Shir and James Rath. "The Schools Contribution to the Cumulating Deficit," The Journal of Educational Research. Volume 64, Number 6, 1971.
 - Cronkhite, Kenneth K. "A Study of the Relationship of Selected Factors to Attendance of High School Students at the O. T. Autry Area Vocational Technical School."
 Unpublished Report, Oklahoma State University, Still-water, Oklahoma, 1971.
 - Divita, Charles, Jr. "Attitudes Toward Vocational Education in the Secondary Schools of West Virginia,"

 July, 1968 (ED 029 984).
 - Harris, Lynn. "Lynn, How Could You! Said the Counselor,"

 American Vocational Journal, Vol. 461/7, October, 1971.
 - Hoyt, Kenneth B. "The 'Image Gap' in Vocational Educational Counseling," School Shop, 29/6:22-24, February, 1970.
 - Jahoda, Marie and Neil Warren. Attitudes. Baltimore: Penguin Books, Inc., 1966.
 - Keller, Franklin J. Vocational Education. Chicago: The University of Chicago Press, 1965.

- Klaurens, Mary K. "Occupational Experience and Career Development Training for Distributive Educators and Vocational Counselors." Final Report, Minnesota University, Minneapolis College of Education, 1970.
- Miller, Wayne. Personal Interview. Okmulgee: Oklahoma State Technical Branch, April, 1971.
- Mitchell, Donald L. "A Study of Attitudes, Interests, and Current Practices Related to Career Orientation Activity's in the Elementary Schools in Oklahoma." Unpublished Ed. D. Dissertation, Oklahoma State University, Stillwater, Oklahoma, 1971.
 - Muskogee Daily Phoenix-Times Democrat. Editorial. Muskogee, Oklahoma, February 25, 1971.
- National Advisory Council Report on Vocational Education, First Report, Washington, D. C., July 15, 1969.
 - National Advisory Council Report on Vocational Education,
 Second Report, Washington, D. C., November 15, 1969.
 - National Advisory Council Report on Vocational Education, <u>Third Report</u>, Washington, D. C., July 10, 1970.
 - Newsome, George L., Jr., Harold W. Gentry, and Lester D. Stephens. "Changes in Consistency of Educational Ideas Attributable to Student-Teaching Experiences,"

 The Journal of Teacher Education, XVI (1965).
 - Norris, Marsena M. "Selected Behavioral Changes of Students Attending the Southern Oklahoma Area Vocational-Technical Center During 1966-67." Unpublished Ed. D. Dissertation, Oklahoma State University, Stillwater, Oklahoma, July, 1968.
 - Noll, Victor H. <u>Introduction to Educational Measurement</u>. Boston: Houghton-Mifflin Company, 1967.
 - Oklahoma Advisory Council to State Board for Vocational-Technical Education, First Report, Oklahoma City, 1969.
- Popham, James W. <u>Educational Statistics</u>. New York: Harper and Roe, 1967.

- Pritchard, Jack W. "A Study of Attitudinal Influences Determining Program Emphases of Beginning Teachers of Vocational Agriculture." Unpublished Ed. D. Dissertation, Oklahoma State University, Stillwater, Oklahoma, May, 1970.
- Public Law 90-576. Amendments to The Vocational Education Act of 1963: U. S. Congress, 1968.
- Remmers, H. H. Introduction to Opinion and Attitude Measurement. New York: Harper and Brothers, 1959.
- Rokeach, Milton. The Open and Closed Mind. New York: Basic Books, Inc., 1960.
- Rymyon, Richard P. and Audrey Haber. Fundamentals of Behavorial Statistics. Reading Massachusetts: Addison-Wesley Publishing Company, 1968.
 - Siegel, Sidney. Nonparametric Statistics For The Behavioral Sciences. New York: McGraw-Hill Book Company, 1956.
 - Shilt, Bernard A. "The Changing Image of Vocational-Technical Education," <u>American Vocational Journal</u>, February, 1970.
 - Shultz, Fred A. "Selected Aspects of Vocational Image as 30 Perceived by a Public Categorized by Occupational Levels." Unpublished Ed. D. Dissertation, Oklahoma State University, Stillwater, Oklahoma, July, 1971.
 - Spengler, James P. "Attitudes of School Board Members Toward Occupational Education." Albany, New York: Bureau of Occupational Education, Research, February, 1970 (ED 042 029).
 - Tulsa Daily World. Editorial. November 14, 1971.
 - Van Dalen, Deobold B. <u>Understanding Educational Research</u>. New York: McGraw-Hill Book Company, 1966.
 - Venn, Grant. Man Education and Work. Washington, D. C.: American Council on Education, 1967.
 - Wiggins, Lloyd L. "A Study of Attitudinal Changes of Student Teachers in Agricultural Education." Unpublished Ed. D. Dissertation, Oklahoma State University, Stillwater, Oklahoma, 1968.

Zaleznik, Abraham and David Moment. The Dynamics of Interpersonal Behavior. New York: John Wiley and Sons, Inc., 1964. APPENDIX A

ATVE SCALE

DEVELOPMENT OF THE ATVE SCALE

The ATVE Scale was developed at the University of

Nebraska as a part of a study to accomplish the following:

"The Development of Material For The Orientation of School

Administrators to Vocational Needs and Programs."*

A research team, led by Mr. John Engler, developed sixty-seven items by working with other members of the project staff and consultants. After the items were constructed and given summated ratings, they were submitted to a panel of experts in the fields of test construction and vocational education to be analyzed for statements of ambiguity, double meaning, and factual rather than attitudinal content.

The revised items of the ATVE Scale were administered to a pilot group of graduate students who had extensive, some, and no experience in high school administration; all of whom were practicing administrators or were involved in administrative courses.

Analyses of the data from the pilot group revealed that 36 of the items discriminated for attitude toward

^{*}Source: Sybouts, Ward and Wayne Krepel. "The Development of Material For The Orientation of School Administrators to Vocational Education Needs and Programs," Final Report, Project No. 5-0155, U. S. Department of Health, Education and Welfare, October 30, 1969.

vocational education at the .01 level and that ten additional items discriminated at the .05 level.

When the Scale was administered to superintendents and principals later in the study, a standard deviation was found that ranged from 8.1 to 13.9 among the various groups.

Results of the study indicated that the ATVE Scale was a very satisfactory instrument for measuring attitudes toward vocational education. The results approximated those of other types of scales and tests used in the study.

ATVE SCALE

Below are several statements. On the separate answer sheet you will find spaces to be marked for each statement. Fill in the appropriate column, depending on whether you strongly agree, agree, don't know. disagree, or strongly disagree with the statement. BE SURE YOU MAKE ONE MARK FOR EVERY QUESTION, BUT NO MORE THAN ONE MARK.

- The records of the State Employment Service can offer valuable statistical information to help administrators plan vocational education programs.
- 2. Vocational training is more than a minor part of the total education program.
- 3. The high cost of vocational training programs should not limit the number of and type of program which can be offered.
- 4. Teachers in vocational programs have been as well trained as teachers in traditional programs.
- 5. Even though most people change jobs several times during a lifetime, training students for an occupation in school is a good investment.
- 6. The main reason high school graduates cannot find jobs is because of their lack of initiative in looking for a job.
- 7. School administrators should be concerned with the occupational needs of their area.
- 8. Students in vocational education programs need to be responsible for the same curriculum as those in academic programs.
- 9. The amount of time spent in setting up work situations in the community which are correlated with school vocational programs is time well spent.
- 10. Students should be placed in vocational programs as a result of their past academic performance rather than their own selection.
- 11. The school administrator should be aware of the occupational needs of the community.
- 12. Even though some students do not have the ability, they can still gain something from the traditional academic program of study.
- 13. Educational programs should be developed for the majority needs.
- 14. Once a person has been trained in a specific occupation there is no need for further training.

- 15. The evaluation of existing vocational education programs needs to be undertaken every year.
- 16. Vocational instruction should be available for those who need, want, and can profit from it.
- Any student who really wants to work can find a job after he graduates.
- 18. The most important consideration for adopting new vocational courses is whether they qualify for federal funds.
- 19. Since automation is changing the world of work so rapidly, it is senseless to train people for occupations.
- 20. Vocational training programs are principally for the slow learner and the student who has not succeeded.
- 21. Most schools are not doing an adequate job of preparing students for the field of work after school.
- 22. Since students have a life time to become trained for work, they should spend their school time learning academic subjects.
- 23. The school administrator should not be the sole judge of the value of a vocational program.
- 24. It is still most important to offer a comprehensive program of vocational agriculture in order to keep production in line with consumption.
- 25. Vocational education equips the student with geographical mobility.
- 26. Only school facilities should be used for vocational training.
- 27. If federal funds were not available for certain vocational programs, administrators would not be so interested in them.
- 28. Traditional methods of instruction, organization, and procedures are very applicable to vocational instruction.
- 29. Since more and more students are going to college, college preparatory programs should be stressed more heavily in school.
- Instructional programs in vocational education should be characterized by flexibility.
- 31. Females, as well as males, should be trained in vocational programs.
- 32. Area Vocational-technical schools assume the local school's responsibility of instruction for the student who does not want to pursue a college education.

- 33. The conditions of training in vocational instruction need not be similar to the conditions in the occupation concerned.
- 34. Allowing students to spend time away from school during the day for work experience results in more problems than benefits.
- 35. More and more technical information is needed to qualify for entry into useful occupations.
- 36. Schools should be concerned with training the adults as well as those who have not yet entered the field of work.
- 37. Programs of vocational education should be operated efficiently at the expense of not being able to broaden the curriculum.
- 38. Vocational classes are provided primarily for low-achievers and delinquent students.
- 39. Vocational education instructors alone should be allowed to plan programs to suite individual needs of students.
- 40. Fewer students would drop out of school if appropriate vocational programs were available.
- 41. Competition in the labor market puts a greater burden for training on the school.
- 42. Most schools do not provide adequate funds for purchase and maintenance of equipment for vocational training programs.
- 43. Guidance and counseling is more important for the college-bound student than the student in a vocational training program.
- 44. The standards expected of vocational education should be as high as the accepted standards in the occupation concerned.
- 45. Students in vocational programs should have the same basic course requirements as college prep students along with their vocational courses.
- 46. Instructional units in vocational education need continuous updating.
- 47. Since automation is changing the world of work so rapidly, students should be given only a general education.
- 48. Real jobs provide the best laboratory for vocational education.
- 49. Vocational instruction should be established on the basis of occupational needs.
- 50. Most instruction in vocational classes is easily worked with in large groups.

- 51. Information from follow-up studies of all high school graduates may have impact on training of students for the field of work.
- 52. It is the primary job of the school to educate, the responsibility of industry to train.
- 53. Laymen as well as educators should coordinate their efforts for vocational education planning.
- 54. The dropout rate when compared with unemployment of the general population implies a need for vacational training in schools.
- 55. High school students have not seen enough of the world of work to make tentative career choices during high school.
- 56. The consideration of the number of students to be enrolled should guide the initiation of a specific vocational course.
- 57. Confusion and friction arise from sharing of facilities for vocational programs.
- 58. The traditional curriculum is still adequate for all students.
- 59. Choosing appropriate vocational goals is an outgrowth of the vocational program.
- 60. A work-study program for needy students leads to dissatisfaction of other students.
- 61. The training of youth for specific occupations is more the responsibility of trade schools than of secondary schools.
- 62. Because of the expense involved, a comprehensive program which would include a variety of courses for all students is impractical.
- 63. The State Department of Education should not be expected to provide all the leadership in vocational programs.
- 64. Adult education programs should be looked upon as part of the responsibility of the local school.
- 65. Descriptive occupational brochures in the school are an appropriate tool for use in career choices.
- 66. The school should require all girls to complete at least one course in home economics.
- 67. Area surveys generally add little to the knowledge of the school administrator in terms of occupational training needs.

Name		I.D.	NUMBER		
		-		1	2 3
					4

ATVE SCALE - ANSWER SHEET

1. () () () () () () () 5. 2. () () () () () () () 6. 3. () () () () () () () 7. 4. () () () () () () () 9. 6. () () () () () () 10. 7. () () () () () () 11. 8. () () () () () () 11. 9. () () () () () () 13. 10. () () () () () () 14. 11. () () () () () () 15. 12. () () () () () () 15. 12. () () () () () () 16. 13. () () () () () () 16. 13. () () () () () () 17. 14. () () () () () 18. 15. () () () () () () 19. 16. () () () () () 19. 16. () () () () () 19. 17. () () () () () 19. 18. () () () () () () 22. 19. () () () () () () 22. 19. () () () () () () 22. 21. () () () () () () 22. 22. () () () () () () () 22. 23. () () () () () () 22. 24. () () () () () () 22. 25. () () () () () () 22. 26. () () () () () () 22. 27. () () () () () () 22. 28. () () () () () () 22. 29. () () () () () () () 22. 29. () () () () () () () 33. 30. () () () () () () () 33. 31. () () () () () () () 33. 32. () () () () () () () 33. 33. () () () () () () () 33. 34. () () () () () () () 33. 35. () () () () () () () 33. 36. () () () () () () () 33. 37. () () () () () () () () 33. 38. () () () () () () () () 34. 39. () () () () () () () () 34. 40. () () () () () () () () 44. 41. () () () () () () () () (44. 41. () () () () () () () () (44. 41. () () () () () () () () (44. 41. () () () () () () () () (44. 41. () () () () () () () () () (44. 44. () () () () () () () () () (44. 45. () () () () () () () () () () (44. 46. (45. () () () () () () () () () (44. 47. () () () () () () () () () () (44. 48. (44. () () () () () () () () () () (44. 49. () () () () () () () () () (44. 41. () () () () () () () () () () (44. 44. () () () () () () () () () () (44. 45. () () () () () () () () () () (44. 46. (44. () () () () () () () () () (44. 47. (44. () () () () () () () () () (44. 48. (44. () () () () () () () () () (44. 49. () () () () () () () () () (44. 41. () () () () () () () () () (44. 44. () () () () () () () () () () () (44.	Item Number	Strongly Agree	Don't Agree Know	Disagree	Strongly Disagree	
2. () () () () () () () () () () () () ()	1.	. ()	() ()		· (· j)	5.
3. () () () () () () () () 7. 4. () () () () () () () 9. 6. () () () () () () () 11. 8. () () () () () () () 11. 10. () () () () () () 11. 11. () () () () () () () 13. 10. () () () () () () () 13. 11. () () () () () () () () 15. 12. () () () () () () () () 15. 12. () () () () () () () () 17. 14. () () () () () () () 17. 14. () () () () () () () 18. 15. () () () () () () () 19. 16. () () () () () () () 19. 17. () () () () () () () 19. 18. () () () () () () () 20. 17. () () () () () () () 22. 19. () () () () () () () 22. 20. () () () () () () () 22. 21. () () () () () () () 25. 22. () () () () () () () 25. 22. () () () () () () () 22. 23. () () () () () () () 22. 24. () () () () () () () 22. 25. () () () () () () () 22. 26. () () () () () () () 22. 27. () () () () () () () 28. 25. () () () () () () () 31. 28. () () () () () () () 32. 29. () () () () () () () 33. 30. 27. () () () () () () () 33. 30. 27. () () () () () () () 33. 30. 27. () () () () () () () 33. 30. 27. () () () () () () () () 33. 31. () () () () () () () () 33. 32. 29. () () () () () () () () 33. 33. 30. () () () () () () () () () 33. 34. () () () () () () () () () () 33. 35. 32. () () () () () () () () () () 33. 36. () () () () () () () () () () () 34. 31. () () () () () () () () () () () () 34. 31. () () () () () () () () () () () () ()		()		è		
4. () () () () () () () — 8. 5. () () () () () () () — 10. 7. () () () () () () () — 11. 8. () () () () () () () — 12. 9. () () () () () () — 13. 100. () () () () () () — 14. 111. () () () () () () — 15. 122. () () () () () () — 16. 133. () () () () () () — 17. 144. () () () () () () — 17. 144. () () () () () — 19. 166. () () () () () — 19. 166. () () () () () — 20. 17, () () () () () — 20. 17, () () () () () — 22. 18. () () () () () — 22. 19. () () () () () — 22. 20. () () () () () — 23. 20. () () () () () — 24. 21. () () () () () — 25. 22. () () () () () — 26. 23. () () () () () — 26. 23. () () () () () — 26. 23. () () () () () — 27. 24. () — 27. 24. () — 29. 26. () — 30. 31. () — 32. 29. () () () () () — 33. 30. () () () () — 34. 31. () — 33. 32. () () () () () — 33. 33. () () () () () — 34. 31. () () () () — 37. 34. () () () () () — 37. 34. () () () () () — 37. 34. () () () () () — 37. 34. () () () () () — 37. 34. () () () () () — 37. 34. () () () () () — 37. 34. () () () () () — 37. 34. () () () () () — 37. 35. () () () () () — 37. 36. () () () () () — 37. 37. () () () () () — 38. 39. () () () () () — 37. 34. () () () () () — 37. 34. () () () () () — 37. 34. () () () () () — 37. 34. () () () () () — 37. 35. () () () () () — 37. 36. () () () () () — 37. 37. () () () () () () — 37. 38. () () () () () — 37. 39. () () () () () — 40. 37. () () () () () — 41. 38. () () () () () — 42. 39. () () () () () — 44. 41. () () () () () — 44. 44. () () () () () () — 45. 44. () () () () () — 46. 45. () () () () () — 47. 44. () () () () () () — 46. 45. () () () () () () — 47. 44. () () () () () () () () () () () — 46. 45. () () () () () () () () () () () () ()) (
5. () () () () () () () 10. 7. () () () () () () () 111. 8. () () () () () () () 12. 9. () () () () () () () 13. 10. () 14. 11. () () () () () () () 15. 112. () () () () () () 15. 113. () () () () () () 16. 13. () () () () () () 17. 14. () () () () () () 18. 15. () () () () () () 19. 16. () () () () () 19. 17. () () () () () () 19. 18. () () () () () () 22. 19. () () () () () () 22. 19. () () () () () () 22. 20. () () () () () () 22. 21. () () () () () () 22. 22. () () () () () () () 22. 22. () () () () () () () 22. 23. () () () () () () () 22. 24. () () () () () () () 22. 25. () () () () () () () 22. 26. () () () () () () () 22. 27. () () () () () () () 22. 28. () () () () () () () 33. 30. 27. () () () () () () () 33. 30. 27. () () () () () () () 33. 30. 31. () () () () () () () 33. 33. 30. () () () () () () () () 33. 34. () () () () () () () () 33. 35. 32. () () () () () () () () 33. 36. () () () () () () () () () 33. 37. () () () () () () () () 33. 38. () () () () () () () () () 33. 39. 36. () () () () () () () () () 34. 31. () () () () () () () () () () 34. 31. () () () () () () () () () () () () ()		\sim				
6. () () () () () () [10. 7. () () () () () () () () () () () () ()					()	
7. () () () () () () () 11; 8. () () () () () () 12; 9. () () () () () () 13; 10. () () () () () () 14, 11. () () () () () () 15; 12. () () () () () () () 16; 13. () () () () () () () 17; 14. () () () () () () () 18; 15. () () () () () () () 19; 16. () () () () () () () 20; 17, () () () () () () () 22; 18. () () () () () () () 22; 19. () () () () () () () 22; 20. () () () () () () () 22; 21. () () () () () () 22; 22. () () () () () () () 22; 23. () () () () () () () 22; 24. () () () () () () 22; 25. () () () () () () 22; 26. () () () () () () () 22; 26. () () () () () () () 22; 27. () () () () () () () 31; 28. () () () () () () 33; 30. () () () () () () () 33; 31. () 32; 29. () () () () () () () 33; 32. () () () () () () () 33; 33. () () () () () () () 33; 34. () () () () () () () 33; 35. () () () () () () () 33; 36. () () () () () () () 33; 37. () () () () () () () 33; 38. () 33; 39. () () () () () () () () 33; 39. 36. () () () () () () () 33; 39. 36. () () () () () () () () 33; 39. 36. () () () () () () () () 34; 31. () () () () () () () () 34; 31. () () () () () () () () 34; 32. () () () () () () () () () 34; 34. () () () () () () () () () 34; 35. () () () () () () () () () () () () ()				()	()	
8. () () () () () () () 12. 9. () () () () () () () 13. 10. () () () () () () 14. 11. () () () () () () () 15. 12. () () () () () () () 15. 13. () () () () () () () 17. 14. () () () () () () () 17. 14. () () () () () () () 18. 15. () () () () () () () 19. 16. () () () () () () () 20. 17. () () () () () () () 22. 18. () () () () () () () 22. 19. () () () () () () () 22. 19. () () () () () () () 22. 20. () () () () () () () 22. 20. () () () () () () () 22. 21. () () () () () () () 22. 22. () () () () () () () 22. 23. () () () () () () () 22. 24. () () () () () () 22. 25. () () () () () () () 22. 26. () () () () () () 22. 27. () () () () () () 30. 27. () () () () () () 31. 28. () () () () () () () 33. 30. () () () () () () () 33. 31. () () () () () () 33. 32. () () () () () () () 33. 33. () () () () () () () 33. 34. () () () () () () () 33. 35. () () () () () () () 33. 36. () () () () () () () 33. 37. () () () () () () () 33. 38. () () () () () () () () 33. 39. () () () () () () () () 33. 39. () () () () () () () () 33. 39. () () () () () () () () 33. 39. () () () () () () () () () 34. 40. () () () () () () () () 44. 41. () () () () () () () () (44. 44. () () () () () () () () (44. 45. () () () () () () () () (48.				()	().	
9. () () () () () () 13. 10. () () () () () 14. 11. () () () () () () () 15. 12. () () () () () () () 16. 13. () () () () () () () 17. 14. () () () () () () () 18. 15. () () () () () () () 19. 16. () () () () () () () 20. 17. () () () () () () () 22. 19. () () () () () () () 22. 19. () () () () () () () 23. 20. () () () () () () () 22. 21. () () () () () () () 22. 22. () () () () () () () 22. 23. () () () () () () () 22. 24. () () () () () () () 22. 25. () () () () () () () 22. 26. () () () () () () () 22. 27. () () () () () () () 22. 29. () () () () () () () 31. 28. () () () () () () () 33. 30. () () () () () () () 33. 31. () () () () () () () 33. 33. () () () () () () () 33. 33. () () () () () () () 33. 34. () () () () () () () 33. 35. () () () () () () () 33. 36. () () () () () () () 33. 37. () () () () () () () 33. 38. () () () () () () () 33. 39. () () () () () () () 33. 39. () () () () () () () 33. 31. () () () () () () () 33. 33. () () () () () () () () 33. 34. () () () () () () () () 33. 35. () () () () () () () () 33. 36. () () () () () () () () () 33. 37. () () () () () () () () () 34. 38. () () () () () () () () () () () 44. 41. () () () () () () () () () (44. 41. () () () () () () () () () (44. 41. () () () () () () () () () (44. 42. () () () () () () () () () () (44. 44. () () () () () () () () () () (44. 44. () () () () () () () () () () (44. 44. () () () () () () () () () () (44. 44. () () () () () () () () () () () (44. 44. () () () () () () () () () () () (44. 44. () () () () () () () () () () () () (44. 44. () () () () () () () () () () () () ()		(.)		()	() ,	
10. () () () 14. 11. () () () () 15. 12. () () () () () 16. 13. () () () () () 17. 14. () () () () 19. 16. () () () () 20. 17. () () () () 22. 18. () () () () 22. 19. () () () () () 22. 19. () () () () () 22. 21. 19. () () () () () () 22. 23. 22. 22. 23. 22. 22. 23. 22. 24. 22. 24. 22. 22. 22. 23. 23. 24. 24. 25. 22. 22. 24. 24. 25. 25. 22. 26.		()		(\cdot)	()	
11. () () () 15. 12. () () () () 16. 13. () () () () 17. 14. () () () () () 18. 15. () () () () () 19. 16. () () () () () 20. 17. () () () () () 21. 22. 19. () () () () () 22. 23. 20. () () () () () 22. 23. 20. () () () () () () 22. 23. 22. 24. 22. 21. () () () () () 22. 23. () () () () () () 22. 24. () () () () () () 22. 22. () () () () ()		()		()	()	
12. () () () 16. 13. () () () () 17. 14. () () () () 18. 15. () () () () () 19. 16. () () () () () 20. 21. 21. 21. 22. 29. 21. 22. 23. 22. 23. 22. 23. 22. 24. 22. 23. 22. 23. 23. 22. 22. 23.		()			()	
13. () () () 17. 14. () () () () 18. 15. () () () () 19. 16. () () () () () 20. 17. () () () () () 21. 21. 21. 22. 19. () () () () () 22. 19. 24. 23. 22. 22. 29. 22. 22. 22. 22. 23. 22. 22. 22. 23. 22. 23. 22. 23. 22. 23. 22. 23. 22. 23. 23. 23. 23. 23. 23. 23. 23. 23. 23. 23. 23.		()	() () ₁	()	()	
14. () () () 18. 15. () () () 19. 16. () () () () 20. 17. () () () () 22. 18. () () () () () 22. 19. () () () () () 22. 19. 22. 23. 20. () () () () 23. 20. () () () () 24. 21. () () () () 22. <td< td=""><td>12.</td><td>()</td><td>() ()</td><td>()</td><td>()</td><td></td></td<>	12.	()	() ()	()	()	
15. () () () 19. 16. () () () 20. 17. () () () () 21. 18. () () () () 22. 19. () () () () 23. 20. () () () () 23. 20. () () () () 24. 21. () () () () 25. 22. () () () () 26. 23. () () () () 27. 24. () () () () 22. 25. () () () () 22. 26. () () () () () 22. 26. () () () () () 33. 27. () () () () () 331. 28. () () () <td></td> <td>()</td> <td>() ()</td> <td>()</td> <td>()</td> <td></td>		()	() ()	()	()	
16. () () () 20. 17. () () () 21. 18. () () () () 22. 19. () () () () 23. 20. () () () () 24. 21. () () () () 22. 22. () () () () 22. 23. () () () () 22. 24. () () () () 22. 23. () () () () 22. 24. () () () () () 22. 24. () () () () () 22. 25. () () () () () 22. 26. () () () () () 33. 27. () () () () 33. 28. () ()	14.	()	() ()	()	(·)	18.
16. () () () 20. 17. () () () 21. 18. () () () () 22. 19. () () () () 23. 20. () () () () 24. 21. () () () () 25. 22. () () () () 26. 23. () () () () 27. 24. () () () () 22. 25. () () () () 22. 24. () () () () () 22. 24. () () () () () 22. 25. () () () () () 22. 26. () () () () () 33. 27. () () () () 33. 28. () ()	15.	()	()	(-)	()	19.
17, () () () 21. 18. () () () 22. 19. () () () () 22. 20. () () () () 24. 21. () () () () 25. 22. () () () () 26. 23. () () () () 27. 24. () () () () 22. 24. () () () () 22. 25. () () () () 22. 26. () () () () () 30. 27. () () () () () 33. 28. () () () () () 33. 30. () () () () () 33. 31. () () () () () 33. 32. ()				i (j	· ()	
18. () () () () 22. 19. () () () () 23. 20. () () () () 24. 21. () () () () 25. 22. () () () () 26. 23. () () () () 27. 24. () () () () 227. 24. () () () () 228. 25. () () () () () 229. 26. () () () () () 331. 322. 29. () () () () () 333. 333. 333. 333. 333. 334. 334. 334. 334. 335. 336. 337. 336. 337. 337. 338. 339. 339. 339. 339. 339. 339. 339. 339. 339. 339. 339. 339.		· ČŚ		Ò	ČŚ.	
19. () () () 23. 20. () () () 24. 21. () () () () 25. 22. () () () () 26. 23. () () () () 27. 24. () () () () 28. 25. () () () () 30. 27. () () () () 31. 28. () () () () 33. 30. () () () () 33. 30. () () () () 33. 31. () () () () 33. 32. () () () () 33. 33. () () () () 33. 34. () () () () 33. 35. () () () () 33. <t< td=""><td></td><td></td><td></td><td>25</td><td>\sim</td><td></td></t<>				25	\sim	
20. () () () 24. 21. () () () 25. 22. () () () () 26. 23. () () () () 27. 24. () () () () 29. 26. () () () () 30. 27. () () () () 31. 28. () () () () 33. 30. () () () () 33. 30. () () () () 33. 30. () () () () () 33. 30. () () () () () 33. 31. () () () () () 33. 32. () () () () () 33. 33. () () () () () 33. 34. ()						23
21. () () () 25. 22. () () () 26. 23. () () () () 27. 24. () () () () 28. 25. () () () () 29. 26. () () () () 30. 27. () () () () 31. 28. () () () () 33. 29. () () () () 33. 30. () () () () 33. 30. () () () () 33. 31. () () () () 33. 32. () () () () 33. 33. () () () () 33. 34. () () () () () 33. 35. () () () () ()		()		()	()	2/.
22. () () () () 26. 23. () () () () 27. 24. () () () () 28. 25. () () () () 30. 26. () () () () 30. 27. () () () () 31. 28. () () () () 32. 29. () () () () 33. 30. () () () () 33. 30. () () () () 33. 31. () () () () 33. 32. () () () () 33. 33. () () () () 33. 34. () () () () () 33. 35. () () () () () 33. 35. () ()		()		()	()	24.
23. () () () () 27. 24. () () () () 28. 25. () () () () 29. 26. () () () () 30. 27. () () () () 31. 28. () () () () 32. 29. () () () () 33. 30. () () () () 33. 30. () () () () 34. 31. () () () () 33. 32. () () () () 33. 33. () () () () 33. 34. () () () () 33. 35. () () () () 33. 36. () () () () () 33. 36. () () ()		()		()		
24. () () () () 28. 25. () () () () 29. 26. () () () () 30. 27. () () () () 31. 28. () () () () 32. 29. () () () () 33. 30. () () () () 33. 30. () () () () 34. 31. () () () () 35. 32. () () () () 36. 33. () () () () 37. 34. () () () () 38. 35. () () () () 39. 36. () () () () 40. 37. () () () () 41. 38. () () () ()		()	()	()	()	
25. () () () () 30. 27. () () () () 31. 28. () () () () 31. 29. () () () () 33. 30. () () () () 33. 30. () () () () 33. 31. () () () () 33. 32. () () () () 33. 33. () () () () 33. 34. () () () () 33. 35. () () () () 33. 36. () () () () 33. 35. () () () () 33. 36. () () () () 40. 37. () () () () 44. 38. () () () ()		()		(\cdot)		
26. () () () () 30. 27. () () () () 31. 28. () () () () 32. 29. () () () () 33. 30. () () () () 34. 31. () () () () 34. 31. () () () () 33. 32. () () () () 33. 33. () () () () 33. 34. () () () () 33. 35. () () () () 33. 36. () () () () 33. 35. () () () () () 33. 36. () () () () () 44. 37. () () () () () 44. 38. ()		()		()	()	
27. () () () 31. 28. () () () 32. 29. () () () () 33. 30. () () () () () 34. 31. () () () () 34. 35. 32. () () () () 36. 37. 36. 37. 38. 38. 39. 39. 39. 39. 39. 39. 39. 40. 41. 43. 40. 44. </td <td></td> <td>()</td> <td>() ()</td> <td>() ·</td> <td>()</td> <td>29.</td>		()	() ()	() ·	()	29.
28. () () () () 32. 29. () () () () 33. 30. () () () () 34. 31. () () () () 35. 32. () () () () 36. 33. () () () () 37. 34. () () () () 38. 35. () () () () 39. 36. () () () () 40. 37. () () () () 41. 38. () () () () 42. 39. () () () () 44. 40. () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () ()		()	()	()	()	30.
29. () () () 33. 30. () () () () 34. 31. () () () () 35. 32. () () () () 36. 33. () () () () 37. 34. () () () () 38. 35. () () () () 39. 36. () () () () 40. 37. () () () () 41. 38. () () () () 42. 39. () () () () 43. 40. () () () () 44. 41. () () () () 45. 42. () () () () 47. 43. () () () () 47. 44. () () () () ()	27.	()	() ()	()	()	31.
29. () () () () 33. 30. () () () () 34. 31. () () () () 35. 32. () () () () 36. 33. () () () () 37. 34. () () () () 38. 35. () () () () 39. 36. () () () () 40. 37. () () () () 41. 38. () () () () 42. 39. () () () () 43. 40. () () () () 44. 41. () () () () 45. 42. () () () () 47. 44. () () () () 47. 44. () () () ()	28.	()	() ()	()	()	32.
30. () () () 34. 31. () () () () 35. 32. () () () () 36. 33. () () () () 37. 34. () () () () 38. 35. () () () () 39. 36. () () () () 40. 37. () () () () 41. 38. () () () () 42. 39. () () () () 43. 40. () () () () 44. 41. () () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () () 48.	29.	()	()	()	()	33.
31. () () () 35. 32. () () () 36. 33. () () () () 37. 34. () () () () 38. 35. () () () () 39. 36. () () () () 40. 37. () () () () 41. 38. () () () () 42. 39. () () () () 43. 40. () () () () 44. 41. () () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () () 48.		()	() ()	()	()	34.
32. () () () 36. 33. () () () () 37. 34. () () () () 38. 35. () () () () 39. 36. () () () () 40. 37. () () () () 41. 38. () () () () 42. 39. () () () () 43. 40. () () () () 44. 41. () () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () 48.		()		()	$\dot{(}\dot{)}$	35.
33. () () () 37. 34. () () () () 38. 35. () () () () 39. 36. () () () () 40. 37. () () () () 41. 38. () () () () 42. 39. () () () () 43. 40. () () () () 44. 41. () () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () () 48.		\dot{c}				36.
34. () () () 38. 35. () () () () 39. 36. () () () () 40. 37. () () () () 41. 38. () () () () 42. 39. () () () () 43. 40. () () () () 44. 41. () () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () () 48.		\sim		Ò	$\dot{}$	37.
35. () () () () 39. 36. () () () () 40. 37. () () () () 41. 38. () () () () 42. 39. () () () () 43. 40. () () () () 44. 41. () () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () 48.				6	\sim	38
36. () () () () 40. 37. () () () () 41. 38. () () () () 42. 39. () () () () 43. 40. () () () () 44. 41. () () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () 48.						39
38. () () () () 42. 39. () () () () 43. 40. () () () () 44. 41. () () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () 48.		()		\sim		40
38. () () () () 42. 39. () () () () 43. 40. () () () () 44. 41. () () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () 48.	37					41
39. () () () () 43. 40. () () () 44. 41. () () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () 48.	37. 30	()		()	()	42
40. () () () 44. 41. () () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () 48.	J o. ⊹∧			()	()	1.4
41. () () () () 45. 42. () () () () 46. 43. () () () () 47. 44. () () () () 48.						43,
43. () () () () <u>47.</u> 44. () () () () <u>48.</u>	40.					44.
43. () () () () <u>47.</u> 44. () () () () <u>48.</u>						45.
43. () () () () () <u>47.</u> 44. () () () () () <u>48.</u> 45. () () () () () <u>49.</u>			()			46.
44. () () () () () <u>48</u> . 45. () () () () <u>49</u> .	43.		$() \qquad ()$		()	47.
45. () () () () 49.			()		()	48.
	45.	()	() ()	()	()	49.

	4					
Item	Strongly		Don't		Strongly	
Number	Agree	Agree	Know	Disagree	Disagree	
46.					()	50.
47.	()	()	()	()	()	51.
48.	()	()	()	()	()	52.
49.	()	()	()	()	()	53.
50.	()	()	()	()	()	54.
51.	()	()		()	()	55.
52.	()	()	()		$\dot{}$	56.
53.	()	Ò	Ò	Ò	Ò	57.
54.	· (5	\ddot{c}	. (5	Ò	: ¿Ś	58.
55.	$\sim 65^{\circ}$	- 25	\sim	75	ò	59.
56.	\sim	25	~ ~ ~ ~ ~	25		60.
57.	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	- 65	- 25	- 75	\sim	61.
58.	\sim		- > () (()	62.
59.		- > (63.
60.						64.
61.			> (65.
) ()		66.
62.	()	- <u>C</u>				
63.						67.
64.	()	()	()	()	\mathcal{C}	68.
65.		()			()	69.
66.	()		()	()	()	7.0
67.	()	()	()	()	()	71.

ATVE SCALE ANSWER SHEET

NAME	AMEI. D. NUMBER							
	Strongly Agree	Agree	Don't Know	Disagree	1 2 Strongly Disagree	3 4		
1.	(3)	(2)	(1)	(0)	(0)	5.		
2.	(3)	(2)	(1)	(0)	(0)	6.		
3.	(4)	(3)	(2)	(1)	(0)	7		
4.	(3)	(2)	(2)	(1)	(0)	8.		
5.	(3)	(2)	(1)	(0)	(0)	9.		
6.	(0)	(1)	(1)	(2)	(3)	$\frac{1}{10}$.		
7.	(3)	(2)	(1)	(0)	(0)	11.		
8.	(0)	(1)	(1)	(2)	(4)	12.		
9.	(3)	(2)	(1)	(0)	(0)	13.		
						14.		
10.	(0)	(1)	(1)	(2)	(4)			
11.	(3)	(2)	(0)	(0)	(0)	15.		
12.	(0)	(2)	(2)	(3)	(4)	16.		
13.	(3)	(2)	(1)	(1)	(0)	17.		
14.	(0)	(0)	(0)	(2)	(3)	18.		
15.	(3)	(2)	(1)	(0)	(0)	19		
16.	(3)	(2)	(0)	(0)	(0)	20.		
17.	(0)	(1)	(2)	(2)	(3)	21.		
18.	(0)	(0)	(0)	(2)	(3)	22.		
19.	(0)	(0)	(0)	(2)	(3)	23,		
20.	(0)	(1)	(1)	(2)	(3)	24.		
21.	(4)	(3)	(2)	(1)	(0)	25.		
22.	(0)	(1)	(1)	(2)	(4)	26.		
23.	(3)	(2)	. (0)	(0)	(0)	27.		
24.	(0)	(1)	(2)	(3)	(4)	28.		
25.	(4)	(3)	(2)	(1)	(0)	29.		
26.	(0)	(0)	(0)	(2)	(3)	30.		
27.	(0)	(1)	(2)	(3)	(4)	31.		
28.	(0)	(1)	(1)	(2)	(4)	32.		
29.	(0)	(1)	(1)	(2)	(4)	33.		
30.	(3)	(2)	(0)	(0)	(0)	34.		
31.	(3)	(2)	(0)	(0)	(0)	35.		
				(3)	(4)	36.		
32.	(0)	(1)	(2)			37.		
33.	(0)	(1)	(2)	(2)	(4)	38.		
34.	(0):	(0)	(1)	(2)	(4)	39.		
35.	(4)	(2)	(1)	(0)	(0)			
36.	(4)	(2)	(1)	(1)	(0)	40.		
37.	(0)	(1)	(2)	(3)	(4)	41.		
38.	(0)	(1)	(1)	(2)	(3)	42.		
39.	(0)	(1)	(1)	(2)	(4)	43.		
40.	(3)	(2)	(1)	(0)	(0)	44.		
41.	(4)	(2)	(1)	(0)	(0)	45.		
42.	(4)	(2)	(1)	(0)	(0)	46.		
43.	(0)	(0)	(0)	(2)	(3)	47.		
44.	(4)	(2)	(2)	(1)	(0)	48.		
45.	(3)	(2)	(2)	(1)	(0)	49.		
46.	(3)	(2)	(0)	(0)	(0)	50.		

	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree	<u>Score</u>
47.	(0)	(0)	(0)	(2)	(4)	51,
48.	(4)	(2)	(1)	(1)	(0)	52.
49.	(0)	(1)	(2)	(3)	(4)	53.
50.	(4)	(3)	(3)	(1)	(0)	54.
51.	(4)	(2)	(0)	(0)	(0)	55.
52.	(0)	(1)	(2)	(3)	(4)	56.
53.	(3)	(2)	(0)	(0)	(0)	57
54.	(3)	(2)	(1)	(0)	(0)	58.
55.	(0)	(1)	(1)	(2)	(3)	59.
56.	(4)	(3)	(2)	(1)	(0)	60.
57.	(0)	(1)	(2)	(3)	(4)	61.
58.	(0)	(0)	(0)	(2)	(3)	62.
59.	(4)	(3)	(2)	(1)	(0)	63.
60.	(0)	(0)	(1)	(3)	(4)	64.
61.	(0)	(1)	(2)	(3)	(4)	65.
62.	(0)	(1)	(2)	(3)	(4)	66.
63.	(0)	(1)	(2) (3)	(3)	(4)	67.
64.	(4)	(2)	(0)	(0)	(0)	68.
65.	(4)	(2)	(1)	(1)	(0)	69.
66.	(0)	(1)	(2)	(2)	(3)	70.
67.	(0)	(1)	(1)	(2)	(3)	71.

APPENDIX B

DOGMATISM SCALE

OPINION POLL

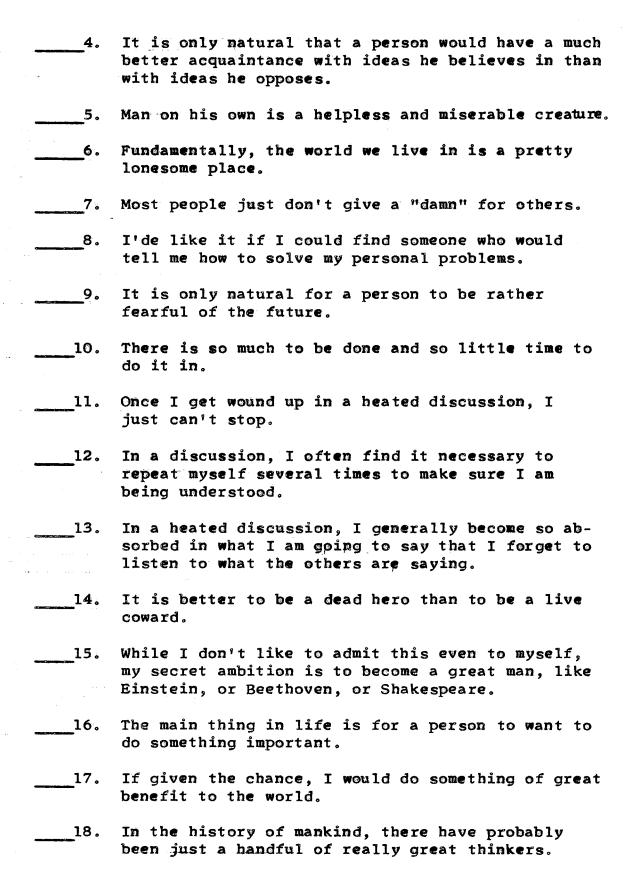
В	ir	th	Da	te	:

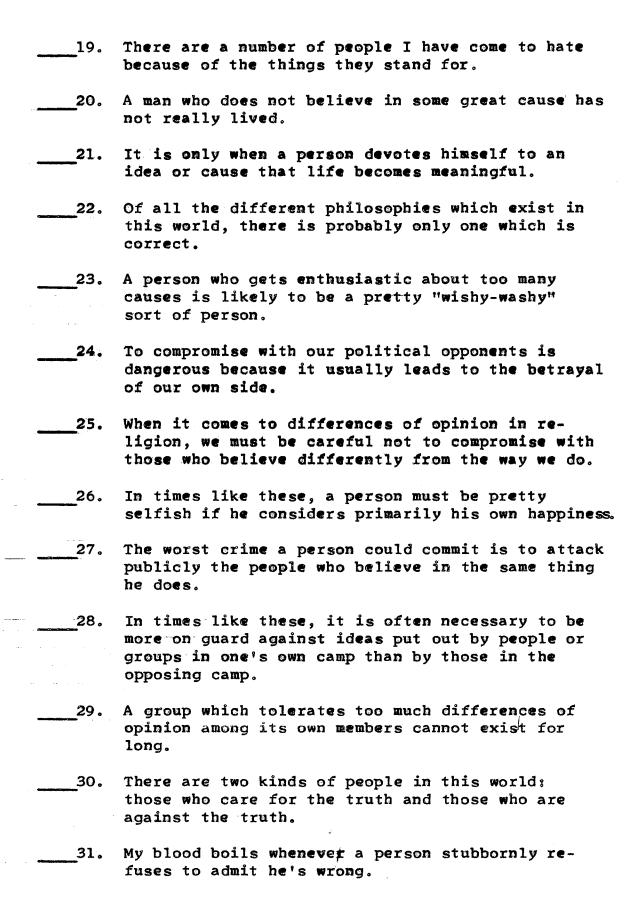
The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others: whether you agree or disagree with any statement, you can be sure that many people feel the same as you do.

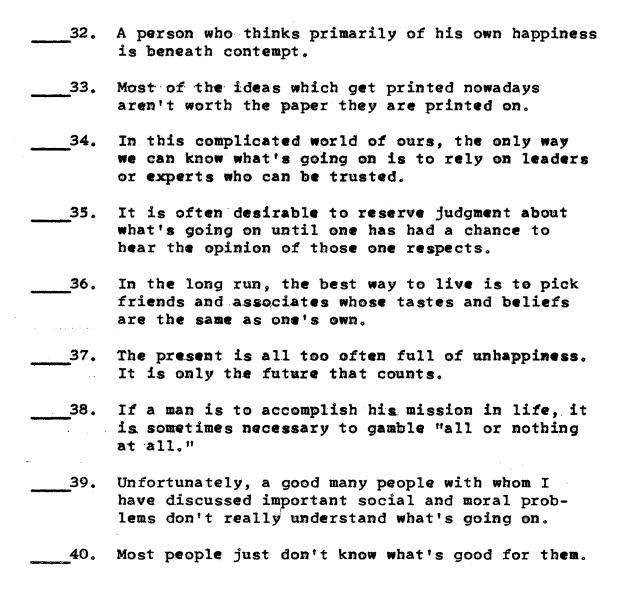
Mark each statement in the left margin according to how much you agree or disagree with it.

Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

- +1: I Agree A Little -1: I Disagree A Little
- +2: I Agree On The Whole -2: I Disagree On The Whole
- +3: I Agree Very Much -3: I Disagree Very Much
- 1. The United States and Russia have just about nothing in common.
- 2. The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.
- 3. Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.







APPENDIX C APTITUDES MEASURED BY THE GATB

The nine aptitudes measured by the GATB are listed below with the letter used as the symbol to identify each aptitude:

- G-Intelligence: General Learning Ability. The ability to "catch on" or understand instructions and underlying principles; the ability to reason and make judgments. Closely related to doing well in school.
- V-Verbal Ability: The ability to understand meaning of words and to use them effectively. The ability to comprehand language and to understand relationships between words; to understand meanings of whole sentences and paragraphs.
- N-Numerical Aptitude: Ability to perform arithmetic operations quickly and accurately.
- S-Spatial Aptitude: Ability to think visually of geometric forms and to comprehend the two-dimensional representation of three-dimensional objects. The ability to recognize the relationships resulting from the movement of objects in space.
- P-Form Perception: Ability to perceive visual comparisons and discriminations and see slight differences in shapes and shadings of figures and widths and lengths of lines.
- Q-Clerical Perception: Ability to perceive pertinent detail in verbal or tabular material. Ability to observe differences in copy, to proofread words and numbers, and to avoid perceptual errors in arithmetic computation.
- K-Motor Coordination: Ability to coordinate eyes and hands or fingers rapidly and accurately in making precise movements with speed. Ability to make a movement response accurately and swiftly.
- F-Finger Dexerity: Ability to move the finers, and manipulate small objects with the fingers, rapidly and accurately.
- M-Manual Dexterity: Ability to move the hands easily and skill-fully. Ability to work with the hands in placing and turning motions.
- Source: United States Department of Labor: General Aptitude

 <u>Test Battery</u>, B-1002, Government Printing Office,
 Washington, D. C. 1970.

APPENDIX D TABLES OF SUMMARY OF DATA

TABLE XII

ATVE SCORES OF ADMINISTRATORS AND COUNSELORS (OR PERSONS SERVING AS COUNSELORS) AND THE MEAN ATVE SCORE OF STUDENTS FROM THEIR SCHOOL

School No.	Administrators' ATVE Score	Counselors' ATVE Score	Students' Mean ATVE Score
1	163	156	136.6
2	157	140	129.8
3	152	147	130.5
4	147	128	125.6
5	145	143	127.8
6	138	160	121.2
7	135	133	118.0
8	134	127	123.5
.9	132	138	122.6
10	129	115	121.4

TABLE XIII

RESULTS OF AREAS MEASURED FOR STUDENTS Occupational School No. GLA Scores Pattern ATVE Scores Above Below Above Below Passed Failed Mean Mean Mean Mean · 1 5. 1. .5

APPENDIX E PERMISSION LETTERS

MICHIGAN STATE UNIVERSITY BAST LANSING - MICHIGAN 48823

DEPARTMENT OF PSYCHOLOGY · OLDS HALL

August 9, 1971

Mr. Glen M. Gardner Bx H Warner, Oklahoma

Dear Mr. Gardner:

You certainly have my permission to use the Dogmatism Scale for research purposes. All you have to do is mimeograph it yourself with the instructions from The Open and Closed Mind. (New York: Basic Books) May I suggest, however, that you mix up the items well and, if possible, pad them with a few items from any other scale that you care to choose. It doesn't matter how you mix them up and it doesn't matter what items you use to pad them with. You may also find two review articles on Dogmatism in the April, 1969 issue of Psychological Bulletin.

I certainly hope that you will furnish me with a copy of the results of your research.

Sincerely yours,

Milton Rokeach

Visiting Professor for 1971-72 University of Western Ontario

London, Ontario, Canada

MR/1b

THE UNIVERSITY OF NEBRASKA-LINCOLN LINCOLN, NEBRASKA 68505

TEACHERS COLLEGE DEPARTMENT OF SECONDARY EDUCATION

August 6, 1971

Mr. Glen M. Gardner Box H Warner, Oklahoma

Dear Mr. Gardner:

I am very pleased to learn that you're interested in using the ATVE scale which was developed here at the University of Nebraska. You most certainly may use this test in any way that will be of benefit in your study.

Very truly yours,

Ward Sybouts Chairman

WS∶mb

VITA

Glen Martin Gardner

Candidate for the Degree of

Doctor of Education

Thesist THE ASSOCIATION BETWEEN LOCAL SCHOOL ADMINISTRA-TORS' AND COUNSELORS' ATTITUDES TOWARD VOCATIONAL EDUCATION AND SELECTED CHARACTERISTICS OF THEIR STUDENTS ATTENDING A VOCATIONAL-TECHNICAL SCHOOL

Major Field: Vocational, Technical and Career Education Biographical:

Personal Data: Born near Wellston, Oklahoma, September 15, 1922, the son of Mr. and Mrs. George Gardner.

Education: Graduated from Wellston High School, Wellston, Oklahoma, in May, 1939; received the Bachelor of Science Degree from Oklahoma State University, Stillwater, Oklahoma, in May, 1943, with a major in Agricultural Education; received the Master of Science Degree in Agricultural Education from Oklahoma State University in August, 1947; completed requirements for the Doctor of Education Degree at Oklahoma State University in May, 1972.

Professional Experience: Teacher of Vocational Agriculture at Haskell High School, Haskell, Oklahoma, from July, 1946, to June, 1961. Teacher of Vocational Agriculture at Warner High School, Warner, Oklahoma, from July, 1961, to June, 1970. Administrative intern, Canadian Valley Area Vocational-Technical School District at El Reno, Oklahoma, from August, 1971, to January, 1972. Research Utilization Specialist, Kiamichi Area Vocational-

Technical School District, Wilburton, Oklahoma, from January, 1972, to present.

Professional Organizations: Member of the Oklahoma
Vocational Agriculture Teachers' Association,
National Vocational Agriculture Teachers' Association, American Vocational Association, Oklahoma
Vocational Teachers' Association, Oklahoma Education Association, Muskogee County Education
Association, Alpha Zeta and Phi Kappa Phi.