# SELECTED ASPECTS OF VOCATIONAL IMAGE AS PERCEIVED BY A PUBLIC CATEGORIZED BY OCCUPATIONAL LEVELS

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# CHAPTER I

## INTRODUCTION

The rapid and extensive changes that are taking place in vocational education have created a need for vocational educators to be cognizant of the public attitude toward vocational training. To facilitate program planning, secure continuing cooperation and support and thus to promote program effectiveness, it is important to know how various segments of the public--non-vocational educators, present and former students, parents and members of the business community--generally perceive vocational education programs. Are these programs perceived as being second class--as dumping grounds for "problem students" who may not be capable, for one reason or another, of succeeding in academic studies? Or, does the public hold the image that the student enrolled in a vocational program is simply following an alternate route to success which is respectable, equal and often preferred to the so-called academic or college preparatory route? Obviously, the concept of vocational education image to which the public suscribes has a great deal of bearing upon whether or not programs are successful in attempts to prepare individuals to become fulfilled, contributing members of society.

### Statement of the Problem

A major question among Oklahoma vocational educators today is,

"What is the image of vocational education in our state?" Vocational education in Oklahoma, as well as nationally, is experiencing a period of transition. Major changes in the scope, nature, direction, and goals of vocational education have taken place in the last five years. These changes are certain to continue at an accelerated rate in the period just ahead. Yet, the current image of vocational education is based largely on observations of programs which have grown out of former policies and practices.

It seems reasonable to assume that better planning of vocational education programs could be accomplished in Oklahoma if the current vocational image held by the public were known. Therefore, this study was an attempt to assess certain aspects of vocational image as perceived by selected segments of a public.

## Purpose of the Study

The primary purpose of this study was to determine the image of vocational education in Oklahoma as perceived by members of a public categorized by levels of employment, and to compare the image of vocational education perceived by persons comprising the respective categories in selected cities.

## Objectives of the Study

In order to accomplish the purpose of this study, the following specific objectives were formulated:

1. To determine if the public perceives that more vocational programs should be offered at all educational levels,
2. To determine if the public perceives that the quality of

secondary vocational education programs is adequate.

3. To determine if the public perceives that vocational programs can benefit students of all ability levels.
4. To determine the public perception of the way in which vocational education programs cooperate and are aligned with the needs of local industry.
5. To determine how the public perceives vocational education in comparison to the rest of the educational system.
6. To determine if the public perceives that vocational education programs are adequately accomplishing their major purpose which is to provide education for gainful employment for all who desire it, need it, and show the initiative to obtain it.
7. To determine if the public perceives that it is adequately informed about opportunities available in and provided by vocational education.

## Rationale for the Study

In the past few years there have been some rather significant moves to revamp and modernize vocational education and to bring programs into closer alignment with individual and societal needs. The first of these was the Vocational Education Act of 1963 which gave new meaning, scope and status to all of vocational education as emphasized in the declaration of purpose for the act as follows:

> It is the purpose of this part to authorize Federal grants to the states to assist them to maintain, extend, and improve existing programs of vocational education, to develop new programs of vocational education, and to provide part-time employment for youths who need the earnings from such employment to continue their vocational training on a full-time basis,

> so that persons of all ages in all communities of the State--those in high school, those who have completed or discontinued their formal education and are preparing to enter the labor market, those who have already entered the labor market but need to upgrade their skills or learn new ones, and those with special educational handicaps--will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training (1).

The Vocational Education Amendments of 1968 (2) is the latest and most extensive attempt to enhance the success potential of individuals through programs of occupational education. Although the major purpose of vocational education under this legislation remained the same as that in the 1963 Act, there were numerous specific changes prescribed for the betterment of programs. For example, the new amendments created a National Advisory Council on Vocational Education appointed by the President; annually each State participating in the program must submit a State plan; also, programs intended mainly to stimulate innovative or developmental efforts in vocational education were authorized for a limited period of time. There can be little doubt but what recent legislation prescribes some rather definite and positive steps to upgrade the purposes and functions of vocational education. The overriding concern has been to advance the total program and thereby provide gate-ways to rewarding careers for large numbers of our youth and adults.

Thus, it can be concluded that vocational education enjoys a very favorable image in the eyes of Congress. However, does this hold true for the public in general? Can it be said that changes in the way the public perceives vocational education have kept pace with changes in the quality of programs?

## Assumptions and Limitations of the Study

### Assumptions

For the purposes of this study the following assumptions were made:

1. Those individuals within an interview site where at least three vocational programs existed in the school system at the interview site would be more likely to have formed opinions and attitudes toward vocational education.
2. Twenty individuals at each of the six interview sites would constitute an adequate sample for the study.
3. The attitude of the individual selected for interview in an occupation at a given location would be representative of others in the same occupational area in that location.
4. The statements that were developed by the steering committee and included in the study would adequately assess the image of vocational education as perceived by the respondents.

### Limitations

The following limitations of the study were recognized by the investigator:

1. In order for a city to be selected for an interview site, it was required to have at least three of the following four vocational education programs currently in its secondary school system: (1) vocational agriculture education, (2) trade and industrial education, (3) distributive education, and (4) business and office education. Only

six cities in Northern-Central Oklahoma met the criteria.

2. The interviews conducted in the study were only in occupational areas that were considered common to each interview site.
3. Respondents interviewed at each interview site included only those who were available the day the data were collected at that particular site.
4. Interviews were conducted in only twenty different occupations at each interview site. Four interviews were completed in each of the five occupational categories set forth in the study.

## Definition of Terms

Professional: Refers to those occupations which usually require individuals that have graduated from institutions of higher learning. These occupations require persons to perform duties in decision making, mangement and other areas which are primarily of a cognitive nature.

Technical: Refers to those occupations which usually require individuals that have completed two years of post-secondary training in a junior college, technical institute, or specialized school. Some workers will qualify through on-the-job training rather than formal education. The length of on-the-job training varies for different occupation. These occupations require persons to perform duties of both the cognitive and manipulative nature.

Skilled: Refers to those occupations which usually require individuals that have acquired the skills for their occupations through a formal apprenticeship program consisting of systematic

on-the-job training, supplemented by formal classroom instruction or from moving from one semi-skilled job to another over a period of years. Others may qualify by training acquired through the armed forces, vocational, trade, and technical school programs. These occupations require persons to perform duties primarily of manipulative nature.

Semi-skilled: Refers to those occupations which usually require individuals that have learned their jobs by completing brief periods of training on the job. These occupations are manipulative in nature. The repetitive and routine tasks performed by these workers can be learned quickly and mastered in a few weeks. In general, these workers are told exactly what to do, and their work is closely supervised.

Un-skilled: Refers to those occupations that do not require workers with a degree or marketable skill through additional education beyond high school. These workers are required very little special training because of the tasks they perform.

Public: Refers to those occupations that can be classified into categories such as professional, technical, skilled, semi-skilled, or unskilled.

Image: Refers to a mental conception held in common by members of a group and symbolic of a basic attitude and orientation.

Steering Committee: Refers to an occupationally diversified group of leading vocational educators in Oklahoma.

## Development of the Study

After the passage of the Vocational Education Act of 1963 and

later the Vocational Education Amendments of 1968, vocational leaders throughout the country became very concerned with the image of vocational education. At various vocational meetings the investigator attended, inevitably the speaker would mention "image". Some individuals would state the "vocational education image must be improved", yet they usually did not relate exactly what the image was or what part of vocational education needed to be improved in order to acquire the new image that was desired.

The investigator then became more interested in the image factor after becoming employed with the State Department of Vocational and Technical Education as an administrative intern. Repeatedly, the word "image" kept appearing in the speeches and discussions of leaders in this department; therefore, the investigator, with the approval of his major adviser, decided to conduct a study concerned with the image of vocational education in Northern-Central Oklahoma.

Six locations were selected in Northern-Central Oklahoma for this study concerning certain aspects of vocational image as perceived by a public categorized by occupational levels. The locations were Enid, Ponca City, Stillwater, Guthrie, Kingfisher, and Watonga. In order for a city to be selected as a location for this study, it was required to have at least three of the following four programs in its secondary public school system: trade and industrial education, business and office education, vocational agriculture education, and distributive education. The public in each location consisted of twenty individuals--four representatives of each of the following occupational categories: professional, technical, skilled, semi-skilled, and unskilled. To arrive at these occupations a book,

Occupational Outlook Handbook (3), was used to select the occupations common to all six areas. The steering committee was then used to categorize these occupations. After the occupations had been categorized, a random selection of six occupations was made in each category, for each location, to determine the public to be interviewed. The first four of these comprised the group to be interviewed; however, in some cases it was necessary to interview one or both of the remaining because some in the initial group could not be interviewed for various reasons. The size of the sample and the number of locations to be interviewed were determined by the limitations imposed by using the interview technique.

The information needed for this study was secured by personal interview. An interview schedule was developed by the author and submitted to the steering committee for their critical review and suggestions. This schedule contained statements of both a positive and negative nature which were designed to determine the image held by the public of selected aspects of vocational education.

Subsequent activities included the development of the data-collection instrument, selection of the interview sites and the selection of the various occupations to be considered in the study for interview purposes. A review of literature and research relating to the study was also conducted and is presented in Chapter II.

# CHAPTER II

## REVIEW OF RELATED LITERATURE AND RESEARCH

The review of related literature and research identified a number of factors relating to this study. However, this does not imply that the factors included comprise an exhaustive list. In order to facilitate clarity and organization, materials reviewed are presented under major topical headings which also served as guides for the search of the literature.

### A Changing Image

The Vocational Education Amendments of 1968 are having a very positive effect in changing the image of vocational education according to many writers. For example, Shilt (4) enumerated some of the image changes that are taking place including the following:

1. Vocational education has received a vote of confidence from the United States Congress to make a major contribution to the social and economic welfare of the nation through educating persons for work. As one Congressman put it, "Vocational educators stand ten feet tall with the Congress."

2. There is a general awakening on the part of school superintendents and principals which recognizes the potential of vocational education as an educational process. There is an acute awareness of the need for closer relationships between vocational and academic education; an awareness which speaks directly to the point that we are all concerned with people and that one cannot draw definite lines to make skill training mutually exclusive from cognitive and affective learnings. "In-Education" is searching for a mission, for a purpose, for a goal, and vocational educators are moving into a closer relationship to the total program of education at all levels--elementary, secondary and higher

education. This may prove to be one of the most significant trends in American education during the 1960s and the 1970s.

3. One of the most significant factors in the changing image of vocational-technical education can be found in the type and amount of research being conducted in our field.

4. New programs in vocational and career education are being developed for persons who have not previously benefitted from the traditional programs of vocational education. Many of these programs have been designed to serve the disadvantaged and the handicapped.

5. Guidance and counseling is taking on new and added responsibilities as vocational education moves toward serving more people at all levels and stages of development. Occupational information is being given to pupils in the elementary and junior high grades, and work experience is becoming an integral part of their total education. All school personnel are becoming more and more oriented toward occupational education.

6. Vocational-technical educators have been alert to newer teaching devices and techniques. They are using the latest devices for improving the teaching-learning process; such as teaching machines, tape recorders, overhead projectors, programed instruction and closed circuit television.

According to a recent newspaper release:

> Vocational education, the neglected stepchild of the educational system, has been downgraded by the public and relegated by educators to unmotivated students. Many parents have felt that vocational education was good only for someone else's children.
>
> A new emphasis must be given to vocational training. Educators should reorient vocational programs to meet the pressing manpower needs of today and tomorrow. Counselors should point out the many opportunities in the skilled trades. Business leaders and the public should lend encouragement and know-how. Let's all recognize the value, dignity and personal fulfillment of careers in the world of work. Let the craftsman's skills be a badge of honor.
>
> Incidentally, there's another plus for vocational schools. Their campuses are quiet and orderly--quite a contrast to the student unrest which is commonplace today in so many colleges and universities (5).

As pointed out by Goldstein (6) in a newspaper editorial published recently:

> The U. S. Office of Education estimates that half of all jobs opening up in the 1970s will require training beyond high school but less than a four-year degree.
>
> "Society is creating a large number of educated incompetents because of its unrealistic demands that a student must have a four-year degree," charges Irving Goldstein, president of Charron-Williams Systems, Inc., a leading network of commercial and technical training schools in the Southeast.
>
> Very often when a student drops out of a four-year college program he has a feeling of failure and is completely lacking in direction.
>
> By contrast, a student pursuing a vocational education course has a sense of immediate accomplishment, a sense of purpose. He knows what type of career he is being prepared for. The course of study is intense and the student has not time for campus protesting.
>
> Society must stop placing a stigma on young people who don't go to college. It must stop looking down on vocational education as nonintellectual or noncreative. The entire concept of vocational education needs to be upgraded.

The National Advisory Council on Vocational Education (7) stressed that vocational education in the United States suffers from a national preoccupation that everyone must go to college. Government at all levels--school administrators, teachers, parents, and students--are all guilty of the attitude that vocational education is designed for somebody else's children.

Federal legislation now encourages the development of separate programs for the disadvantaged. Such programs say to the disadvantaged that they are second-class citizens who cannot make it in the mainstream. Such programs appear to shut the door to career advancement. What the disadvantaged want and need is access to vocational and technical programs for career preparation in the mainstream. Counseling, tutoring, and other support and assistance are essential, but separateness destroys dignity (7).

The instructional program in junior colleges must be situated in

an organizational and financial framework which will allow vocational-technical education to have the leadership and recognition it so rightfully deserves. The day has long since passed when five percent of Americans deal with ideas and the other ninety-five percent work. More then one-half of our present-day labor force works at jobs whose intellectual content demands education and training which can best be offered in colleges.

Existing programs and courses in the secondary school cannot be relied on to salvage, redirect, or even simply to occupy pre-post-secondary vocational-technical students.

Somehow, we must come up with curricula that make the technical and human ties and preparation for work understandable (8).

## School Personnel and the Image of Vocational Education

Educators have decided that superior schools are measured by the number of graduates who later enroll in college. Educators know that parents will support superior schools. Non-college preparatory vocational education, when available, is operated as a charitable, civic enterprise.

Guidance associations insist that occupational goals are short-term goals, and too modest for high school students. (In their view, any pursuit less than college is short-term and all vocational education is modest.)

Administration and guidance seem hopelessly confused by the terminology of "work experience," "work study," and "cooperative work education." Some guidance counselors misrepresent the objectives of industrial cooperative education to potential students (9).

It is essential that all school personnel, and counselors in particular, hold an image of vocational education which is accurate in terms of today's thrust in vocational education. However, this apparently is not always the case because Hoyt (10) found the following negative perceptions of vocational education present among counselors in all parts of the United States:

1. The first negative perception is one of vocational educators' trying to turn out skilled technicians and craftsmen at the secondary-school level.

2. The second negative perception has resulted from what was formerly the major claimed purpose of high school vocational education--to prepare people for gainful employment.

3. A third negative perception has been that vocational education has failed to offer a sufficient variety of choices to students.

4. A final perception held by many counselors is that vocational education exists as something separate and apart from "regular" school.

In a more positive vein, Hoyt further stated that in spite of certain negative images held by more than a few individual counselors, the overriding image--the hopes and aspiration--which the guidance movement holds for vocational education, is positive. This "ideal" image, which is entirely consistent with the goals and objectives of the guidance movement itself, has nine aspects that deserve comment, according to Hoyt (10). These are as follows:

1. Vocational education should be seen as representing a means of expanding the spectrum of educational opportunities.

2. Vocational education should be seen as representing an opportunity for young people to discover and develop the special talents they possess.

3. Vocational education represents one aspect of the school which does, by its basic mode of operation, provide for individual differences.

4. Vocational education represents an opportunity to discover and reflect purposefully on the values of a work-oriented society.

5. Vocational education provides opportunities for all students to experience success at some level in their educational undertakings. It is inherent in the nature of vocational education that no student ever fails completely.

6. Vocational education represents a meaningful and direct contact between the school and the world of work.

7. Secondary-school vocational education represents a different avenue by which young people can explore and make decisions regarding the need for and desirability of post-secondary training and education.

8. High-school vocational education represents one place where students whose abilities are too low to profit from training after high school can acquire basic job skills which will enable them to become productive workers.

9. Vocational education represents an opportunity for young people to explore and develop basic job skills which have wide application in a variety of occupational areas.

Hoyt (10) continued by suggesting four concrete steps which could be taken by vocational educators to create a positive image as follows:

1. Of most importance, it is time for vocational educators to picture their programs in relation to the entire school program.

2. It is time for vocational educators to clearly spell out three major thrusts representing their basic goals. The first is a thrust toward providing all students with a basic awareness of the nature and values of a work-oriented society. The second is a thrust toward providing students headed toward post-secondary vocational training with basic skills which will not only be useful in making future educational decisions but will also be a solid foundation for such training. The third is a thrust toward providing those students who will enter the labor market directly after leaving high school with a set of marketable job skills appropriate for the jobs that will be available to them.

3. Vocational educators at the secondary-school level should recognize, applaud, and capitalize on the rapidly expanding opportunities for post-secondary vocational education.

4. It is time that vocational educators develop enough security in what they are doing to share their results with counselors.

Thus, it can be concluded that the negative image of vocational education held by many practicing counselors, as members of the public, has been created both by the practices of vocational educators and by the lack of clear thinking on the part of many counselors. The true image of vocational education, expressed in terms of its basic goals and objectives, is one which should be viewed positively by all professional counselors if optimum program effectiveness is to be attained.

A study conducted in Massachusetts (11) found junior high school staff members to have favorable attitudes toward vocational education with two major exceptions: vocational education was not perceived to be a suitable experience for scholastically able students; and the occupations for which vocational students were trained were not as socially respectable as other employment alternatives.

The attitudes of junior high school staff members toward vocational education are crucial to the development of programs that meet the total educational needs of students. It might be stated that junior high school staff members differentiate between technicians and theorists and perceive vocational education as a suitable experience for tradesmen and technicians, but not for students with the ability to become theorists (12).

Divita (12) found in a West Virginia study that a "low status" stereotype associated with vocational education programs and students was felt to be a serious factor which hampered the growth of vocational education programs. Vocational education students were often perceived

as being stereotyped as students of low intelligence and from low income families. It was felt that improvement of programs and educating the public about vocational education would do much to remove the "low status" stereotype associated with vocational education programs and students; however, the respondents did not feel that county school systems were presently doing an adequate job of educating the public about vocational education. It was felt that vocational education programs made enough students useful members of society to justify their cost.

Taking a vocational education program in high school was not considered as hindering students from being able to acquire a sound basic education or from pursuing further education after high school. Much of the success of vocational education programs was felt to depend largely upon the degree to which school administrators encouraged and supported such programs.

## Business and Industry and the Image of Vocational Education

Punke (14) stated that previously, "vocational image" reflected work involving gross muscular activity and skills which presumably anybody could acquire.

The current business and employment world looks upon the earlier concepts of vocational education as essentially obsolete but perhaps of historical value--for clues on how to go on from where we are now. One obstacle to going on is the inferiority status implied in the vocational image that seems to be embedded in the personalities of some teachers in vocational and industrial arts education. Perhaps such teachers thus signify that their own learning and teaching

experience has not developed in them a broad understanding of the role which vocational activity actually plays in a modern industrial culture.

The business and industrial community in America seems more alert than the educational community to the idea that the vocational scene is changing as rapidly as the civil rights and urbanization scene. Several aspects of the philosophy of vocational education have not changed accordingly. Does it seem realistic to infer that the philosophy and implementation of vocational education can lead in the nation's vocational development if their present rate of advance leaves them in the trail of dust as industry and technology race over the next hill?

If vocational education does not assume leadership responsibility, it will have to be content with the "Flunky image" of followership (14).

Childs (15) stated that jobs are made by industry not by schools. Too many educators isolate themselves in the classrooms and school shops and teach as <u>they</u> believe a subject should be taught with no consideration of industry, its changes, or its needs for training in new techniques of service and skill development on new unit designs. Educators too often develop a "know-it-all" attitude and as a result do not communicate with industry. Also, there are those who are afraid industry will find out just how much they do not know about the subject.

To assume that industry needs more SELLING so they will welcome vocational graduates as new employees is absurd. If the schools keep in step with industry and aware of its needs, then industry will be waiting with open arms for all the graduates EDUCATION can produce (15).

## Summary

Millions of dollars are being programed for expenditure in the name of vocational education, and ambitious plans are being made to revamp and change vocational education. Much of this is being done without regard for experimentation or consultation with vocational educators. Nor is it supported by research evidence. To put the situation in even better perspective:

> We are in a period of crisis in vocational education. We lack leadership at all levels, and most especially at the federal level. As we stand at the crossroads, we seem inclined to move in many directions at once. Vocational education today has many spokesmen but few statesmen. It is clear that our nation must have a permanent, universal, continuing program of vocational education, readily available to all persons of all age groups and levels of ability, wherever they may live. Let us all remember that our problems will be those that challenge all of vocational education and all vocational educators. We must not be so prone to think of our own specialities. It is important for us, of course, to know and understand and promote our own programs. After all, we do not teach vocational education--we teach for an occupation. But for too long we have tended to have vested interests in our occupational specialties, and this has deterred the total program of vocational education (16).

After an extensive review of related literature and research, the investigator was unable to uncover a similar study, particularly any that involved the attitude of a public, categorized by occupational levels, toward vocational education.

# CHAPTER III

## DESIGN AND CONDUCT OF THE STUDY

The purpose of this chapter is to describe the methods and procedures used in conducting this study. These were dictated by the central purpose of the study which was to determine certain aspects of vocational image as perceived by a public categorized by occupational titles. Specific objectives of the study also provided guidance for the design and conduct of the investigation. These objectives were:

1. To determine if the public perceives that more vocational programs should be offered at all educational levels.
2. To determine if the public perceives that the quality of secondary vocational education programs is adequate.
3. To determine if the public perceives that vocational programs can benefit students of all ability levels.
4. To determine the public perception of the way in which vocational education programs work with and are aligned with the needs of local industry.
5. To determine how the public perceives vocational education in comparison to the rest of the educational system.
6. To determine if the public perceives that vocational education programs are adequately accomplishing their major purpose which is to provide education for gainful employment for all who desire it, need it, and show the initiative to obtain it.
7. To determine if the public perceives that it is adequately informed about opportunities available in and provided by vocational education.

In order to collect and analyze data pertaining to the purpose and objectives developed for guidance of the study effort, it was necessary

to accomplish the following tasks:

1. Determine the population for the study.
2. Develop the instrument for data collection.
3. Develop a procedure for data collection.
4. Select methods of data analysis.

## The Study Population

Six locations were selected in Northern Central Oklahoma for this study concerning certain aspects of vocational image as perceived by a public categorized by occupational levels. The locations were Enid, Guthrie, Watonga, Kingfisher, Stillwater, and Ponca City. These cities were selected as interview sites for this study because of their proximity to Stillwater and because there were at least three of the following four vocational education programs in the secondary public school system of each city: trade and industrial education, business and office education, vocational agriculture education, and distributive education. For purposes of the study, the "public" in each location consisted of twenty individuals--four representatives of each of the following occupational categories: professional, technical, skilled, semi-skilled, and unskilled. The size of the sample and the number of locations in which interviews were conducted were determined by the limitations imposed by using the interview technique of data collection.

To arrive at occupations to be included in the study, the Occupational Outlook Handbook (3) was used to select a group of 54 occupations which were considered to be common to all interview sites. A steering ommmittee, consisting of teacher educators and state department

personnel, was then used to sort these occupations into the aforementioned categories. A list of the members of this committee is offered in Appendix A.

In order to categorize occupations, each member of the committee was asked to indicate whether he felt an occupation should be classified as professional, technical, skilled, semi-skilled or unskilled. To arrive at the consensus of opinion of the committee regarding categorization of the occupation, an average response by the group for each occupation was computed. The following numerical values were assigned to each occupational category for this purpose:

Professional = 5
Technical = 4
Skilled = 3
Semi-skilled = 2
Unskilled = 1

A copy of the instrument used for this purpose is contained in Appendix B.

After the occupations had been categorized, a random sampling procedure was used to determine the specific occupations to be interviewed within each occupational category at each interview site. All the occupations comprising a category were written on a piece of paper and placed in a box. Six occupations were then drawn and listed in the order drawn. The first four occupations on the list were to be interviewed, with the remaining two to be used as replacements in the event some of the first four could not be interviewed. Because of the above procedure, the occupations interviewed at each site varied somewhat. Appendix C contains an overall summary of the study population by

interview site.

## Development of the Instrument

In formulating the statements used on the interview instrument, the investigator reviewed related literature and certain instruments such as those used in studeies by Divita (13), Spengler (17), and Parker and Baker (18). The investigator also considered personal concerns and suggestions from teacher educators and members of the state staff. A Likert-type scale was considered most appropriate for the study as a means of securing the extent to which interviewees agreed with statements contained on the instrument.

After an initial draft of the instrument was developed, it was submitted to the steering committee for their critical review and suggestions. Committee members ranked each statement on a one to five continum with five being greatest in value. The responses from each committee member for each statement were totaled and averaged. These averages were then used to determine the concensus of the committee as to whether a statement would be used on the instrument.

The instrument contained statements of both a positive and negative nature which were designed to determine the image held by a public categorized by occupational levels. Nearly equal amounts of negative and positive statements were included on the instrument. These statements were randomly selected and placed in random order on the interview instrument. (Refer to Appendix D.)

## Collection of the Data

Data were collected by the interview method at each of the

designated interview sites. The investigator was aware that the effectiveness of an interview was largely dependent upon the consistent and careful approach in which it was administered. Therefore, a concerted effort was made to conduct each interview in the same manner.

The following is an example of how the investigator determined the interviewee of a given occupation within an occupational category. Assume a welder, implement dealer, carpenter, bank teller, firemen, and plumber made up a skilled occupational category at an interview site. Upon entering the site, the first welding shop the investigator came to would be the first location for a potential welder interviewee. After interviewing the welder, the investigator would continue to drive through town until an implement dealership was located. At this point an implement dealer would be approached for an interview. This same process continued until four individuals within the six occupations were interviewed. If at all possible, the first four occupations on the list, within an occupational category, were interviewed. Only a very few of those approached by the investigator were not willing to be interviewed.

## Analysis of the Data

The following description of the analysis procedure is included to provide for the reader an overview of the statistical treatment of the data collected.

The interview instrument contained two sections. The first section was comprised of a group of statements to which the interviewees responded on a Likert-type scale which was a continuum from

strongly agree through neutral to strongly disagree. To permit statistical treatment of the data, numerical values were assigned to the response categories according to the following pattern:

Strongly Agree = 5

Agree = 4

Neutral = 3

Disagree = 2

Strongly Disagree = 1

This allowed calculating mean responses to the statements and thus provided inputs for computing analysis of variance. The BMDO 2V Analysis of Variance for Factorial Design computer program as described in BMD Biomedical Computer Programs (18) was utilized to analyze the data in this section.

Popham (20) explained the method employed in the analysis of variance as follows:

> In essense, the method employed in the analysis of variance is to compute the variances of the separate groups being tested for mean differences. The scores of all subjects in the subgroups are then artificially combined into one total group. This is done by regrouping, for analysis purposes, all of the scores in the several groups as though they were one group. The variance of the total group is then computed. If the variance of the artificially combined total group is approximately the same as the average variance of the separate subgroups, then there exists no significant difference between the means of the separate groups. If, on the other hand, the variance of the artificially combined total group is considerably larger than the average variance of the separate subgroups, then a significant mean difference exists between two or more of the subgroups.

Popham also stated the source of variation in the analysis of variance can be viewed in three ways.

> First, "between groups" or the amount of variation resulting from mean differences between the separate groups; second, "within groups" on the amount of variation represented by the sum of the variances of the separate groups; and third,

> the "total" or the amount of variation present when the separate groups are considered as one pooled group (20).

The second section of the interview instrument contained six statements of actions or activities that could possibly improve the image of vocational education. The respondents were asked to rank these in order of importance. The Kendall Coefficient of Concordance: W., was applied to these data in order to determine the overall agreement among persons in the population toward the selected actions that could possibly improve image.

# CHAPTER IV

# PRESENTATION AND ANALYSIS OF THE DATA

## Introduction

The primary purpose of the study was to determine the image of vocational education in Oklahoma as perceived by members of a public categorized by levels of employment, and to compare the image of vocational education as perceived by persons comprising the respective categories in selected cities. In order to accomplish the purpose of the study, the following specific objectives were formulated:

1. To determine if the public perceives that more vocational programs should be offered at all educational levels.
2. To determine if the public perceives that the quality of secondary vocational education programs is adequate.
3. To determine if the public perceives that vocational programs can benefit students of all ability levels.
4. To determine the public perception of the way in which vocational education programs cooperate and are aligned with the needs of local industry.
5. To determine how the public perceives vocational education in comparison to the rest of the educational system.
6. To determine if the public perceives that vocational education programs are adequately accomplishing their major purpose which is to provide education for gainful employment

for all who desire it, need it, and show the initiative to obtain it.

7. To determine if the public perceives that it is adequately informed about opportunities available in an provided by vocational education.

As discussed in the previous chapter, a group of statements was developed to assess the image of vocational education as perceived by the study respondents. These statements were then categorized according to the specific objectives of the study. Therefore, the investigator considered it appropriate to present the findings of the study in sections related to the specific objectives.

To facilitate comparison of the findings by occupational categories and interview sites through mean responses and analysis of variance, numerical values were assigned to the response scale for those statements of a positive nature in the following pattern:

Strongly Agree = 5

Agree = 4

Neutral = 3

Disagree = 2

Strongly Disagree = 1

However, since certain of the statements were purposely of a negative nature and because there were instances in which both positive and negative statements were compared in order to accomplish a given research objective, it was necessary to reverse the above numerical scale for those statements with a negative connotation. The latter scale would be as follows:

Strongly Agree = 1

Agree = 2

Neutral = 3

Disagree = 4

Strongly Disagree = 5

Also, due to a need to determine the average response of a group of interviewees to the statements and because computation of these mean responses resulted in decimal fractions, a range of numerical values was established for each degree of agreement response category for positive and negative statements as follows:

| | Range for Positive Statements | Range for Negative Statements |
|---|---|---|
| Strongly Agree = | 4.5 - 5.0 | 0 - 1.49 |
| Agree = | 3.5 - 4.49 | 1.5 - 2.49 |
| Neutral = | 2.5 - 3.49 | 2.5 - 3.49 |
| Disagree = | 1.5 - 2.49 | 3.5 - 4.49 |
| Strongly Disagree = | 0 - 1.49 | 4.5 - 5.0 |

Thus, if the mean response of a group of interviewees was determined to be 4.6, then according to the foregoing formula the group was considered to strongly agree with the statement in question. The analysis of variance technique was utilized to determine if significant differences in image toward vocational education existed among respondents in various occupational categories and/or interview sites.

## Findings of the Study

### Adequacy of Program Offerings

One group of six statements was included in the study for the purpose of determining whether the public perceived that more

vocational educational programs should be offered at all educational levels. Findings relative to these statements are reported in this section.

TABLE 1

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION IS OFFERING A SUFFICIENT VARIETY OF CHOICES TO STUDENTS."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 2.50 | 3.75 | 2.00 | 3.50 | 3.25 | 2.00 | 2.83 |
| Technical | 2.50 | 3.50 | 3.00 | 2.25 | 3.00 | 3.50 | 2.96 |
| Skilled | 3.75 | 3.75 | 3.75 | 4.00 | 3.25 | 3.50 | 3.67 |
| Semi-skilled | 3.50 | 3.75 | 3.75 | 3.75 | 3.50 | 3.25 | 3.58 |
| Unskilled | 2.25 | 4.00 | 3.50 | 3.50 | 4.00 | 3.75 | 3.50 |
| Grand $\bar{X}$ by Site | 2.90 | 3.75 | 3.20 | 3.40 | 3.40 | 3.20 | |

Table 1 contains a summary of responses to the statement, "vocational education is offering a sufficient variety of choices to students." Overall, it was found that the average response of persons in the skilled, semi-skilled and unskilled levels was in the agree category, while the professional and technical level workers were neutral toward this statement. A comparison of all occupational

levels by interview sites revealed a neutral response for all sites except Guthrie, where the group response was agree. The mean response of all occupational levels to this statement was determined to be 3.31, or neutral.

TABLE 2

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION IS OFFERING A SUFFICIENT VARIETY OF CHOICES TO STUDENTS."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 14.13 | 3.53 | 4.20* |
| Interview Sites | 5 | 8.04 | 1.61 | 1.91 |
| Interaction of Categories and Sites | 20 | 19.67 | .98 | 1.17 |
| Within Groups | 90 | 75.75 | .84 | |
| Total | 119 | 117.59 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)
*Significant at the .05 level

Table 2 contains the results of testing the data in Table 1 for significance of difference. As indicated in Table 2 the F value of 4.20 revealed that there was a significant difference at the .05 level among responses when comparisons were made across occupational categories; however, this was not the case for the remainder of the

comparisons.

TABLE 3

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION WOULD BE STRENGTHENED THROUGH EXPOSING ALL STUDENTS AT ALL GRADE LEVELS TO OCCUPATIONAL INFORMATION."

| Occupational Category | $\bar{X}$ response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 4.00 | 4.50 | 4.00 | 4.25 | 3.50 | 4.25 | 4.08 |
| Technical | 4.00 | 3.75 | 3.25 | 3.00 | 4.00 | 4.00 | 3.67 |
| Skilled | 3.75 | 4.25 | 4.25 | 4.00 | 4.50 | 3.50 | 4.04 |
| Semi-skilled | 4.25 | 4.00 | 4.00 | 3.50 | 3.75 | 4.00 | 3.92 |
| Unskilled | 3.75 | 3.50 | 4.25 | 3.50 | 3.75 | 4.00 | 3.79 |
| Grand $\bar{X}$ by Site | 3.95 | 4.00 | 3.95 | 3.65 | 3.90 | 3.95 | |

According to the data summarized in Table 3, those interviewed responded at the agree level when asked whether they felt exposing all students at all grade levels to occupational information would strengthen vocational education. Professional workers as a group responded at the highest level, technical workers at the lowest. The mean response by sites ranged from 4.0 for persons at Guthrie to 3.65 for those at Kingfisher.

TABLE 4

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION WOULD BE STRENGTHENED THROUGH EXPOSING ALL STUDENTS AT ALL GRADE LEVELS TO OCCUPATIONAL INFORMATION."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 2.88 | .72 | 1.41 |
| Interview Sites | 5 | 1.60 | .32 | .63 |
| Interaction of Categories and Sites | 20 | 10.32 | .52 | 1.01 |
| Within Groups | 90 | 46.00 | .51 | |
| Total | 119 | 60.80 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Inspection of Table 4 reveals that there were no significant differences among the mean responses by occupational categories and interview sites relative to vocational education being strengthened through exposing all students at all grade levels to occupational information.

TABLE 5

SUMMARY OF RESPONSES TO THE STATEMENT, "A WIDER VARIETY OF VOCATIONAL PROGRAMS SHOULD BE OFFERED FOR THOSE STUDENTS NOT GOING TO COLLEGE."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 2.00 | 2.25 | 2.25 | 2.00 | 1.75 | 1.75 | 2.00 |
| Technical | 1.50 | 2.00 | 2.00 | 2.25 | 1.50 | 2.00 | 1.88 |
| Skilled | 2.25 | 1.75 | 2.00 | 3.00 | 2.00 | 2.00 | 2.17 |
| Semi-skilled | 1.50 | 2.25 | 1.75 | 2.50 | 2.25 | 1.75 | 2.00 |
| Unskilled | 2.00 | 1.50 | 1.75 | 2.25 | 2.00 | 2.50 | 2.00 |
| Grand $\bar{X}$ by Site | 1.85 | 1.95 | 1.95 | 2.40 | 1.90 | 2.00 | |

As pointed out earlier, certain statements were purposely formulated in a negative fashion, but responses to these were compared to those of positive-oriented statements. For this reason, it was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing these statements from a negative to a positive connotation. Such was the case for the statement dealt with in Table 5. The overall mean response to this statement was 2.01, which according to the reversed scale for negative statements, would be an agree response. Thus, the respondents agreed that a wider variety of vocational programs should be offered for students not going to college. The average response ranged from 2.17

for skilled workers to 1.88 for those in technical occupations.

TABLE 6

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "A WIDER VARIETY OF VOCATIONAL PROGRAMS SHOULD BE OFFERED FOR THOSE STUDENTS NOT GOING TO COLLEGE."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 3.13 | .78 | 1.00 |
| Interview Sites | 5 | 6.94 | 1.39 | 1.77 |
| Interaction of Categories and Sites | 20 | 29.77 | 1.49 | 1.89* |
| Within Groups | 90 | 70.75 | .79 | |
| Total | 119 | 110.59 | | |

P .05 1.68 (with 20 and 90 degrees of freedom)
*Significant at the .05 level

Results of testing data from the preceding table for significant difference are provided in Table 6. Neither the comparisons among occupational categories nor among the interview sites produced any significant differences of mean responses. However, there were significant mean differences among mean responses by occupational categories and interview sites due to the interaction effect. This interaction is represented by a lack of uniformity among response categories and was interpreted to mean there were differences among

the mean responses due to the effects of these independent variables. The interaction F value for these data was found to be 1.89 which was significant at the .05 level of probability.

TABLE 7

SUMMARY OF RESPONSES TO THE STATEMENT, "THERE IS A NEED FOR COLLEGE LEVEL VOCATIONAL EDUCATION PROGRAMS."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.00 | 4.00 | 3.50 | 4.50 | 4.25 | 4.25 | 4.08 |
| Technical | 3.50 | 3.75 | 4.25 | 3.75 | 4.25 | 3.75 | 3.88 |
| Skilled | 3.75 | 4.25 | 4.00 | 4.00 | 3.00 | 4.00 | 3.83 |
| Semi-skilled | 3.75 | 3.75 | 3.25 | 4.00 | 4.25 | 3.50 | 3.75 |
| Unskilled | 3.00 | 4.50 | 4.00 | 3.50 | 4.25 | 3.75 | 3.83 |
| Grand $\bar{X}$ by Site | 3.60 | 4.05 | 3.80 | 3.95 | 4.00 | 3.85 | |

Participants in the study were asked to express their opinion as to the need for college-level vocational education programs. The group mean response to this statement, as reported in Table 7, was 3.88, which indicated they agreed that such programs were needed. The range of group mean responses was from 3.75 for the semi-skilled category to 4.08 for professional. By interview site, respondents at Guthrie

(4.05) were most in agreement with the statement while those at Enid were least in agreement (3.60).

TABLE 8

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "THERE IS A NEED FOR COLLEGE LEVEL VOCATIONAL EDUCATION PROGRAMS."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 1.50 | .38 | .63 |
| Interview Sites | 5 | 2.68 | .54 | .90 |
| Interaction of Categories and Sites | 20 | 13.70 | .69 | 1.16 |
| Within Groups | 90 | 53.25 | .59 | |
| Total | 119 | 71.13 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Table 8 contains data obtained as a result of testing the mean responses from Table 7 for significance of differences. Comparisons of all sources of possible variation failed to yield any differences among mean responses which could be judged significant at the .05 level of probability.

TABLE 9

SUMMARY OF RESPONSES TO THE STATEMENT, "CURRENT OFFERINGS OF VOCATIONAL EDUCATION IN HIGH SCHOOLS SHOULD BE EXPANDED."

| Occupational Category | $\bar{X}$ Response by Interview Site: Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| Professional | 3.50 | 4.25 | 4.00 | 4.25 | 4.25 | 4.00 | 4.04 |
| Technical | 4.25 | 3.75 | 3.75 | 3.75 | 4.00 | 2.75 | 3.71 |
| Skilled | 3.75 | 4.25 | 4.00 | 3.00 | 4.25 | 3.75 | 3.83 |
| Semi-skilled | 4.00 | 4.00 | 4.25 | 4.00 | 3.75 | 3.75 | 3.96 |
| Unskilled | 3.75 | 4.00 | 3.50 | 3.75 | 4.25 | 3.50 | 3.79 |
| Grand $\bar{X}$ by Site | 3.85 | 4.05 | 3.90 | 3.75 | 4.10 | 3.55 | |

As detailed in Table 9 persons comprising all occupational categories and in all interview sites were of the opinion that current offerings of vocational education in high schools should be expanded. Those in the professional category expressed the highest mean response of 4.04, but the other groups' responses were only slightly below this, with the mean response of all groups falling into the agree category. Technical-level workers at Ponca City and skilled workers at Kingfisher responded in a neutral fashion. Taken as a whole, the interviewees from Stillwater exhibited the highest mean level of agreement, 4.10, while the 3.55 mean response from the Ponca City group was the lowest.

TABLE 10

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "CURRENT OFFERINGS OF VOCATIONAL EDUCATION IN HIGH SCHOOLS SHOULD BE EXPANDED."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 1.70 | .43 | .79 |
| Interview Sites | 5 | 4.07 | .81 | 1.51 |
| Interaction of Categories and Sites | 20 | 9.60 | .48 | .89 |
| Within Groups | 90 | 48.50 | .54 | |
| Total | 119 | 63.87 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Table 10 contains data obtained as a result of testing the mean responses from Table 9 for significance of differences. Comparisons of all sources of possible variation failed to yield any differences among mean responses which could be judged significant at the .05 level of probability.

TABLE 11

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION PROGRAMS SHOULD BE MADE AVAILABLE TO STUDENTS BEFORE THEY ARE IN HIGH SCHOOL."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.00 | 3.75 | 3.75 | 4.00 | 3.00 | 3.25 | 3.63 |
| Technical | 3.25 | 3.25 | 3.25 | 3.50 | 3.00 | 2.00 | 3.04 |
| Skilled | 2.25 | 3.75 | 3.00 | 3.50 | 2.75 | 2.50 | 2.96 |
| Semi-skilled | 3.50 | 3.00 | 4.00 | 2.75 | 3.50 | 3.50 | 3.38 |
| Unskilled | 2.50 | 3.25 | 3.25 | 2.50 | 3.00 | 2.75 | 2.88 |
| Grand $\bar{X}$ by Site | 3.10 | 3.40 | 3.45 | 3.25 | 3.05 | 2.80 | |

According to data presented in Table 11 the 120 persons interviewed for the study had a mean response of neutral (3.18) regarding a recommendation that vocational education be made available to students before they are in high school. However, it should be noted that those comprising the professional category responded at the agree level. Mean responses by interview sites ranged from a high of 3.45 for Watonga to a low of 2.80 for Ponca City, all of which were neutral in nature.

TABLE 12

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION PROGRAMS SHOULD BE MADE AVAILABLE TO STUDENTS BEFORE THEY ARE IN HIGH SCHOOL."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 9.53 | 2.38 | 2.11 |
| Interview Sites | 5 | 5.88 | 1.18 | 1.04 |
| Interaction of Categories and Sites | 20 | 16.17 | .81 | .72 |
| Within Groups | 90 | 101.75 | 1.13 | |
| Total | 119 | 133.32 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Analysis of variance of the data reported in Table 12 disclosed the respondents in the various interview sites did not differ significantly in their opinions. The F values were found to be below the level required for significance at the .05 level of probability.

TABLE 13

OVERALL SUMMARY OF RESPONSES RELATIVE TO STATEMENTS REGARDING ADEQUACY OF OFFERINGS (RESEARCH OBJECTIVE 1)

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 3.50 | 3.79 | 3.25 | 3.75 | 3.33 | 3.25 | 3.48 |
| Technical | 3.17 | 3.33 | 3.25 | 3.08 | 3.46 | 3.00 | 3.22 |
| Skilled | 3.25 | 3.67 | 3.50 | 3.58 | 3.29 | 3.21 | 3.46 |
| Semi-skilled | 3.42 | 3.46 | 3.50 | 3.42 | 3.50 | 3.29 | 3.43 |
| Unskilled | 2.88 | 3.96 | 3.38 | 3.17 | 3.54 | 3.38 | 3.38 |
| Grand $\bar{X}$ by Site | 3.24 | 3.64 | 3.38 | 3.40 | 3.42 | 3.22 | |

In order to assess the respondents' overall opinion as to the adequacy of vocational education offerings which related to research objective 1, Table 13 was developed. These data represent a summary of the mean responses by occupational categories and interview sites to the statements encompassed in Tables 1, 3, 5, 7, 9 and 11. The entire group of interviewees expressed a mean response of 3.38 or neutral and the mean response of each occupational category was of the same type, ranging from a low of 3.22 for the technical category to a high of 3.48 for the professionals. Those interviewed at Guthrie, with their mean response of 3.64, were agreed that more vocational

offerings were needed; however, those in the remainder of the interview sites responded neutrally in this regard. Professional and skilled workers at Guthrie and professionals at Kingfisher responded at the agree level, but all others were neutral.

TABLE 14

SUMMARY ANALYSIS OF VARIANCE OF RESPONSES RELATIVE TO STATEMENTS REGARDING ADEQUACY OF OFFERINGS

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 35.22 | 8.80 | 1.57 |
| Interview Sites | 5 | 82.04 | 16.41 | 2.93* |
| Interaction of Categories and Sites | 20 | 107.07 | 5.35 | .96 |
| Within Groups | 90 | 503.25 | 5.59 | |
| Total | 119 | 727.58 | | |

P .05 2.30 (with 5 and 90 degrees of freedom)
*Significant at the .05 level

All responses collected relative to the perception of adequacy of vocational education offerings were subjected to analysis of variance to determine if significant differences existed among the mean responses. Results of these tests are offered in Table 14. Inspection of this table reveals that when comparisons were made among

interview sites, significant differences did exist. The resulting F value was 2.93 which was significant at the .05 level of confidence. Comparisons across occupational categories and other sources of variation did not yield significant F values.

## The Quality of Vocational Education Programs

A second group of statements was developed in order to determine if the public interviewed perceived that the quality of vocational education programs was adequate. Mean responses to these statements and tests for significance of differences among the responses are reported in tables in this section.

TABLE 15

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION IS A BENEFICIAL EDUCATIONAL PROGRAM FOR THOSE WHO WILL ENTER THE LABOR MARKET UPON GRADUATION FROM HIGH SCHOOL."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 5.00 | 4.75 | 4.50 | 5.00 | 4.25 | 5.00 | 4.75 |
| Technical | 4.75 | 4.75 | 4.50 | 5.00 | 4.75 | 4.50 | 4.71 |
| Skilled | 4.50 | 4.75 | 4.50 | 3.75 | 4.00 | 4.25 | 4.29 |
| Semi-skilled | 4.25 | 4.50 | 4.25 | 4.25 | 4.75 | 4.00 | 4.33 |
| Unskilled | 4.50 | 5.00 | 4.50 | 4.25 | 4.75 | 4.25 | 4.54 |
| Grand $\bar{X}$ by Site | 4.60 | 4.75 | 4.45 | 4.45 | 4.50 | 4.40 | |

Table 15 contains a summary of responses to the statement, "Vocational education is a beneficial educational program for those who will enter the labor market upon graduation from high school." Overall, it was found that the average response of persons in the professional, technical, and unskilled levels was in the strongly agree category, while the skilled and semi-skilled level workers were in the agree category toward this statement. A comparison of all occupational levels by interview sites revealed a strongly agree response for all except Watonga, Kingfisher, and Ponca City, where their response was agree. The mean response of all occupational levels to this statement was determined to be 4.53, or strongly agree.

TABLE 16

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION IS A BENEFICIAL EDUCATIONAL PROGRAM FOR THOSE WHO WILL ENTER THE LABOR MARKET UPON GRADUATION FROM HIGH SCHOOL."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 4.22 | 1.05 | 3.24* |
| Interview Sites | 5 | 1.68 | .34 | 1.03 |
| Interaction of Categories and Sites | 20 | 6.78 | .34 | 1.04 |
| Within Groups | 90 | 29.25 | .33 | |
| Total | 119 | 41.92 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)
*Significant at the .05 level

Table 16 contains the results of testing the data in Table 15 for significance of difference. As indicated in Table 16, the F value of 3.25 revealed that there was a significant difference at the .05 level among responses when comparisons were made across occupational categories; however, this was not the case for the remainder of the comparisons.

TABLE 17

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION IN THE HIGH SCHOOL IS HIGHLY OVERRATED."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.50 | 4.50 | 3.50 | 4.50 | 4.00 | 4.00 | 4.17 |
| Technical | 3.00 | 3.75 | 4.25 | 4.00 | 4.00 | 3.00 | 3.67 |
| Skilled | 3.75 | 4.00 | 3.75 | 3.25 | 4.00 | 3.75 | 3.75 |
| Semi-skilled | 3.50 | 3.25 | 3.25 | 3.25 | 4.00 | 3.50 | 3.46 |
| Unskilled | 3.25 | 4.00 | 3.00 | 3.00 | 3.50 | 3.50 | 3.38 |
| Grand $\bar{X}$ by Site | 3.60 | 3.90 | 3.55 | 3.60 | 3.90 | 3.55 | |

As pointed out earlier, certain statements were purposely formulated in a negative fashion, but responses to these were compared to those of positive-oriented statements. For this reason, it was

necessary to reverse the numerical values assigned to the response categories, which had the effect of changing these statements from a negative to a positive connotation. Such was the case for the statement dealt with in Table 17. The overall mean response to this statement was 3.68, which according to the reversed scale for negative statements, would be a disagree response. Thus, the respondents disagreed that vocational education in the high school is highly overrated. The average response ranged from 4.17 for professional workers to 3.38 for those in unskilled occupation.

TABLE 18

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION IN THE HIGH SCHOOL IS HIGHLY OVERRATED."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 8.80 | 2.20 | 3.01* |
| Interview Sites | 5 | 2.74 | .55 | .75 |
| Interaction of Categories and Sites | 20 | 12.30 | .61 | .84 |
| Within Groups | 90 | 65.75 | .73 | |
| Total | 119 | 89.59 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)
*Significant at the .05 level

Table 18 contains data resulting from testing the mean responses in Table 17 for significance of differences. The only significant difference in responses at the .05 level was found to be among the occupational categories as indicated by the F value of 3.01.

TABLE 19

SUMMARY OF RESPONSES TO THE STATEMENT, "A GRADUATE OF A HIGH SCHOOL VOCATIONAL EDUCATION PROGRAM IS GENERALLY SUITED ONLY FOR UNSKILLED WORK."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-ronga | King-fisher | Still-water | Ponca City | |
| Professional | 4.50 | 4.00 | 3.75 | 4.25 | 4.00 | 3.00 | 3.92 |
| Technical | 3.50 | 4.50 | 4.00 | 4.00 | 3.75 | 2.50 | 3.71 |
| Skilled | 3.75 | 4.50 | 4.25 | 4.00 | 4.50 | 3.25 | 4.04 |
| Semi-skilled | 4.00 | 4.00 | 3.75 | 3.50 | 4.00 | 4.00 | 3.88 |
| Unskilled | 3.50 | 4.25 | 3.75 | 3.50 | 3.25 | 3.50 | 3.63 |
| Grand $\bar{X}$ by Site | 3.85 | 4.25 | 3.90 | 3.85 | 3.90 | 3.25 | |

Another negative statement is reported in Table 19, but responses to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a

negative to a positive connotation. The overall mean response to this statement was 3.83, which according to the reversed scale for negative statements would be a disagree response. Thus, the respondents disagree with the statement that a graduate of a high school vocational education program is generally suited only for unskilled work. The average response ranged from 4.04 for skilled workers to 3.63 for unskilled occupations.

TABLE 20

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "A GRADUATE OF A HIGH SCHOOL VOCATIONAL EDUCATION PROGRAM IS GENERALLY SUITED ONLY FOR UNSKILLED WORK."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 3.67 | .92 | 1.19 |
| Interview Sites | 5 | 8.27 | 1.65 | 2.14 |
| Interaction of Categories and Sites | 20 | 13.23 | .66 | .86 |
| Within Groups | 90 | 69.50 | .77 | |
| Total | 119 | 94.67 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Table 20 contains data obtained as a result of testing the mean responses from Table 19 for significance of differences. Comparisons of all sources of possible variation failed to yield any differences

among mean responses which could be judged significant at the .05 level of probability.

TABLE 21

SUMMARY OF RESPONSES TO THE STATEMENT, "MOST VOCATIONAL EDUCATION COURSES LEAD NOWHERE."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.75 | 4.75 | 4.00 | 4.75 | 3.50 | 4.50 | 4.38 |
| Technical | 4.25 | 4.50 | 4.25 | 5.00 | 4.25 | 4.00 | 4.38 |
| Skilled | 4.50 | 4.75 | 3.50 | 4.50 | 4.75 | 4.50 | 4.42 |
| Semi-skilled | 4.25 | 3.00 | 4.00 | 4.25 | 4.00 | 4.25 | 3.96 |
| Unskilled | 3.75 | 3.50 | 4.25 | 3.75 | 4.50 | 4.00 | 3.96 |
| Grand $\bar{X}$ by Site | 4.30 | 4.10 | 4.00 | 4.45 | 4.20 | 4.25 | |

The data in Table 21 were collected by a negative-type statement, but responses to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a negative to a positive connotation. The overall mean response to this statement was 4.22, which according to the reversed scale for negative statements, would be a disagree response.

Thus, the respondents disagree with the statement that most vocational education courses lead nowhere. The average response ranged from 4.42 for skilled workers to 3.96 for those in semi-skilled and unskilled occupations.

TABLE 22

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "MOST VOCATIONAL EDUCATION COURSES LEAD NOWHERE."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 4.45 | 1.11 | 3.26* |
| Interview Sites | 5 | 1.84 | .37 | 1.08 |
| Interaction of Categories and Sites | 20 | 16.95 | .85 | 2.48** |
| Within Groups | 90 | 30.75 | .34 | |
| Total | 119 | 53.99 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)
*Significant at the .05 level
**P .05 1.68 (with 20 and 90 degrees of freedom)

Analysis of variance of the data reported in Table 22 disclosed that respondents in the various occupational categories differed significantly in their opinions. The associated F value of 3.26 was found to be significant at the .05 level of confidence. Comparison of other possible sources of variation revealed there were significant

mean differences among mean responses by occupational categories and interview sites due to the interaction effect. The interaction is represented by a lack of uniformity among response categories and was interpreted to mean there were differences among the mean responses due to the effects of these independent variables. The interaction F value for these data was found to be 2.48 which was highly significant at the .05 level of probability.

TABLE 23

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION RECEIVES MORE SUPPORT AND FUNDS THAN IT DESERVES."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 4.75 | 4.50 | 3.50 | 3.75 | 4.00 | 3.75 | 4.04 |
| Technical | 3.75 | 4.00 | 4.25 | 4.25 | 4.25 | 3.50 | 4.00 |
| Skilled | 3.50 | 4.50 | 4.00 | 3.75 | 4.00 | 3.75 | 3.92 |
| Semi-skilled | 4.00 | 3.50 | 4.00 | 4.00 | 3.75 | 4.00 | 3.88 |
| Unskilled | 4.00 | 3.25 | 3.50 | 3.25 | 4.50 | 3.75 | 3.71 |
| Grand $\bar{X}$ by Site | 4.00 | 3.95 | 3.85 | 3.80 | 4.10 | 3.75 | |

As pointed out earlier, certain statements were purposely formulated in a negative fashion, but responses to these were compared to those of positive-oriented statements. For this reason, it was necessary to reverse the numerical values assigned to the response

categories, which had the effect of changing these statements from a negative to a positive connotation. Such was the case for the statement dealt with in Table 23. The overall mean response to this statement was 3.91, which according to the reversed scale for negative statements, would be a disagree response. Thus, the respondents disagree with the statement that vocational education receives more support and funds than it deserves. The average response ranged from 4.04 for professional workers to 3.71 for those in unskilled occupations.

TABLE 24

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION RECEIVES MORE SUPPORT AND FUNDS THAN IT DESERVES."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | .55 | .14 | .19 |
| Interview Sites | 5 | 2.74 | .55 | .75 |
| Interaction of Categories and Sites | 20 | 11.55 | .58 | .79 |
| Within Groups | 90 | 65.75 | .73 | |
| Total | 119 | 80.59 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Inspection of Table 24 reveals that there were no significant differences among the mean responses by occupational categories and interview sites relative to vocational education receiveing more support and funds than it deserves.

Another negative statement is reported in Table 25, but responses

to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a negative to a positive connotation. The overall mean response to this statement was 3.64, which according to the reversed scale for negative statements, would be a disagree response. Thus, the respondents disagree with the statement that secondary vocational education programs do not prepare students for employment. The average response ranged from 3.92 for professional workers to 3.42 for those in unskilled occupations.

TABLE 25

SUMMARY OF RESPONSES TO THE STATEMENT, "SECONDARY VOCATIONAL EDUCATION PROGRAMS DO NOT PREPARE STUDENTS FOR EMPLOYMENT."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.50 | 3.50 | 3.75 | 4.25 | 4.00 | 3.50 | 3.92 |
| Technical | 4.00 | 3.00 | 4.25 | 4.00 | 3.75 | 2.50 | 3.58 |
| Skilled | 3.50 | 3.50 | 4.00 | 3.75 | 3.25 | 3.75 | 3.63 |
| Semi-skilled | 4.25 | 3.50 | 3.75 | 3.50 | 3.50 | 3.50 | 3.67 |
| Unskilled | 3.00 | 4.00 | 3.75 | 3.50 | 3.25 | 3.00 | 3.42 |
| Grand $\bar{X}$ by Site | 3.85 | 3.50 | 3.90 | 3.80 | 3.55 | 3.25 | |

TABLE 26

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "SECONDARY VOCATIONAL EDUCATION PROGRAMS DO NOT PREPARE STUDENTS FOR EMPLOYMENT."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 3.13 | .78 | 1.19 |
| Interview Sites | 5 | 6.34 | 1.27 | 1.93 |
| Interaction of Categories and Sites | 20 | 12.87 | .64 | .98 |
| Within Groups | 90 | 59.25 | .66 | |
| Total | 119 | 81.59 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Table 26 reveals that there were no significant differences among the mean responses by occupational categories and interview sites relative to the statement that secondary vocational education programs do not prepare students for employment.

In order to assess the respondents' overall opinion regarding quality of programs, Table 27 was developed. These data represent a summary of the mean responses by occupational categories and interview sites to the statements encompassed in Tables 15, 17, 19, 21, 23 and 25. The entire group of interviewees expressed a mean response of 3.98 or agree and the mean response of each occupational category was of the same type, ranging from a low of 3.83 for the unskilled category

to a high of 4.19 for the professionals. The mean responses by interview sites revealed they were in agreement that the quality of secondary vocational education programs is adequate. Technical workers at Ponca City responded at the neutral level but all others were agree.

TABLE 27

OVERALL SUMMARY OF RESPONSES RELATIVE TO STATEMENTS REGARDING QUALITY OF PROGRAMS (RESEARCH OBJECTIVE 2)

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.67 | 4.33 | 3.83 | 4.42 | 3.96 | 3.96 | 4.19 |
| Technical | 3.88 | 4.08 | 4.25 | 4.38 | 4.13 | 3.33 | 4.01 |
| Skilled | 3.92 | 4.33 | 4.00 | 3.83 | 4.08 | 3.96 | 4.02 |
| Semi-skilled | 4.04 | 3.63 | 3.75 | 3.79 | 4.00 | 3.88 | 3.85 |
| Unskilled | 3.67 | 4.33 | 3.79 | 3.54 | 3.96 | 3.67 | 3.83 |
| Grand $\bar{X}$ by Site | 4.03 | 4.14 | 3.92 | 3.99 | 4.02 | 3.76 | |

All responses collected relative to the perception of quality of programs were subjected to analysis of variance to determine if significant differences existed among the mean responses. Results of these tests are offered in Table 28. Inspection of this table reveals

that when comparisons were made among occupational categories, significant differences did exist. The resulting F value was 3.00 which was significant at the .05 level of confidence. Comparisons across interview sites and other sources of variation did not yield significant F values.

TABLE 28

SUMMARY ANALYSIS OF VARIANCE OF RESPONSES RELATIVE TO STATEMENTS REGARDING QUALITY OF PROGRAMS

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 77.42 | 19.35 | 3.00* |
| Interview Sites | 5 | 59.98 | 12.00 | 1.86 |
| Interaction of Categories and Sites | 20 | 213.98 | 10.70 | 1.66 |
| Within Groups | 90 | 579.75 | 6.44 | |
| Total | 119 | 931.13 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)
*Significant at the .05 level

Vocational Education Programs Concerning Student Ability Levels

A third group of statements was developed in order to determine if the public interviewed perceived that vocational programs can benefit students of all ability levels. Mean responses to these

statements and tests for significance of differences among these responses are reported in tables in this section.

TABLE 29

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATORS ARE LOOKING FOR THE ACADEMICALLY-TALENTED STUDENT RATHER THAN PROVIDING FOR STUDENTS WITH LOW LEVELS OF ACADEMIC APTITUDE."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 3.25 | 3.25 | 3.25 | 4.00 | 3.75 | 3.00 | 3.42 |
| Technical | 3.75 | 3.75 | 3.50 | 3.75 | 4.00 | 3.00 | 3.63 |
| Skilled | 2.75 | 3.75 | 3.25 | 2.75 | 3.50 | 3.50 | 3.25 |
| Semi-skilled | 3.75 | 3.75 | 3.75 | 3.50 | 4.00 | 3.75 | 3.75 |
| Unskilled | 3.75 | 3.75 | 3.75 | 3.75 | 3.25 | 3.25 | 3.58 |
| Grand $\bar{X}$ by Site | 3.45 | 3.75 | 3.50 | 3.55 | 3.70 | 3.30 | |

The data in Table 29 were collected by a negative statement, but responses to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a negative to a positive connotation. The overall mean response to this statement was 3.54, which according to the reversed

scale for negative statements, would be a disagree response. Thus, the respondents disagreed that vocational educators are looking for the academically-talented student rather than providing for students with low levels of academic aptitude. The average response ranged from 3.75 for semi-skilled workers to 3.25 for those in skilled occupations.

TABLE 30

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATORS ARE LOOKING FOR THE ACADEMICALLY-TALENTED STUDENT RATHER THAN PROVIDING FOR STUDENTS WITH LOW LEVELS OF ACADEMIC APTITUDE."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 3.22 | .80 | 1.66 |
| Interview Sites | 5 | 2.07 | .41 | .86 |
| Interaction of Categories and Sites | 20 | 9.18 | .46 | .95 |
| Within Groups | 90 | 43.50 | .48 | |
| Total | 119 | 57.97 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Table 30 contains data obtained as a result of testing the mean responses from Table 29 for significance of differences. Comparisons of all sources of possible variation failed to yield any differences

among mean responses which could be judged significant at the .05 level of probability.

TABLE 31

SUMMARY OF RESPONSES TO THE STATEMENT, "BRIGHT STUDENTS SHOULD BE ENCOURAGED TO ENTER VOCATIONAL EDUCATION PROGRAMS."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 4.25 | 4.25 | 3.00 | 4.25 | 4.00 | 4.00 | 3.96 |
| Technical | 3.50 | 3.50 | 3.25 | 4.00 | 4.25 | 3.50 | 3.67 |
| Skilled | 3.00 | 3.75 | 3.50 | 3.50 | 3.25 | 3.75 | 3.46 |
| Semi-skilled | 4.25 | 4.00 | 3.50 | 3.75 | 4.25 | 3.50 | 3.88 |
| Unskilled | 3.25 | 4.50 | 3.75 | 4.25 | 4.25 | 3.00 | 3.83 |
| Grand $\bar{X}$ by Site | 3.65 | 4.00 | 3.40 | 3.95 | 4.00 | 3.55 | |

Table 31 contains a summary of responses to the statement, "Bright students should be encouraged to enter vocational education programs." Overall it was found that the average response of persons in all occupational categories was agree except the skilled workers. Their response was neutral. A comparison of all occupational levels by interview sites revealed an agree response for all sites except Watonga where the group response was neutral. The mean response of

all occupational levels to this statement was determined to be 3.76, or agree.

TABLE 32

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "BRIGHT STUDENTS SHOULD BE ENCOURAGED TO ENTER VOCATIONAL EDUCATION PROGRAMS."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 3.78 | .95 | 1.49 |
| Interview Sites | 5 | 6.74 | 1.35 | 2.12 |
| Interaction of Categories and Sites | 20 | 12.22 | .61 | .96 |
| Within Groups | 90 | 57.25 | .64 | |
| Total | 119 | 79.99 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Inspection of Table 32 reveals that there were no significant differences among the mean responses by occupational categories and interview sites relative to bright students' being encouraged to enter vocational education programs.

Another negative statement is reported in Table 33, but responses to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a

negative to a positive connotation. The overall mean response to this statement was 3.77, which according to the reversed scale for negative statements, would be a disagree response. Thus, the respondents disagreed that vocational education courses are designed primarily for the student with limited abilities. The average response ranged from 4.00 for technical workers to 3.50 for those in semi-skilled occupations. The mean response was disagree for all interview sites.

TABLE 33

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION COURSES ARE DESIGNED PRIMARILY FOR THE STUDENT WITH LIMITED ABILITIES."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 4.75 | 3.50 | 3.00 | 4.00 | 4.00 | 4.00 | 3.88 |
| Technical | 4.00 | 4.50 | 3.75 | 4.00 | 4.00 | 3.75 | 4.00 |
| Skilled | 3.75 | 4.00 | 4.00 | 4.25 | 4.00 | 3.25 | 3.88 |
| Semi-skilled | 3.25 | 3.00 | 3.75 | 3.75 | 3.50 | 3.75 | 3.50 |
| Unskilled | 3.50 | 3.75 | 3.50 | 3.25 | 3.75 | 3.75 | 3.58 |
| Grand $\bar{X}$ by Site | 3.85 | 3.75 | 3.60 | 3.85 | 3.85 | 3.70 | |

Results of testing data from the preceding table for significant differences are provided in Table 34. Neither the comparisons among

occupational categories nor among the interview sites produced any significant differences of mean responses.

TABLE 34

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION COURSES ARE DESIGNED PRIMARILY FOR THE STUDENT WITH LIMITED ABILITIES."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 4.38 | 1.10 | 2.08 |
| Interview Sites | 5 | 1.07 | .21 | .40 |
| Interaction of Categories and Sites | 20 | 12.52 | .63 | 1.19 |
| Within Groups | 90 | 47.50 | .53 | |
| Total | 119 | 65.47 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

According to the data summarized in Table 35, those interviewed responded at the agree level when asked whether they felt vocational education programs could be of benefit to each student regardless of his ability level. Professional workers as a group responded at the highest level, technical workers at the lowest. The mean response by sites ranged from 4.15 at Enid and Stillwater to 4.00 for those at Guthrie.

TABLE 35

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION PROGRAMS CAN BE OF BENEFIT TO EACH STUDENT REGARDLESS OF HIS ABILITY LEVEL."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.50 | 4.00 | 3.75 | 4.50 | 4.25 | 4.25 | 4.21 |
| Technical | 3.75 | 3.75 | 4.25 | 4.00 | 3.50 | 4.00 | 3.88 |
| Skilled | 4.25 | 4.25 | 4.00 | 3.75 | 4.25 | 4.00 | 4.08 |
| Semi-skilled | 4.25 | 3.75 | 4.00 | 4.00 | 4.25 | 4.00 | 4.04 |
| Unskilled | 4.00 | 4.25 | 4.25 | 4.00 | 4.50 | 4.00 | 4.17 |
| Grand $\bar{X}$ by Site | 4.15 | 4.00 | 4.05 | 4.05 | 4.15 | 4.05 | |

Inspection of Table 36 reveals that there were no significant differences among the mean responses by occupational categories and interview sites relative to vocational education programs being of benefit to each student regardless of his ability level.

TABLE 36

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION PROGRAMS CAN BE OF BENEFIT TO EACH STUDENT REGARDLESS OF HIS ABILITY LEVEL."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 1.62 | .40 | 1.44 |
| Interview Sites | 5 | .38 | .08 | .27 |
| Interaction of Categories and Sites | 20 | 5.08 | .25 | .91 |
| Within Groups | 90 | 25.25 | .28 | |
| Total | 119 | 32.32 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

As pointed out earlier, certain statements were purposely formulated in a negative fashion, but responses to these were compared to those of positive-oriented statements. For this reason, it was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing these statements from a negative to a positive connotation. Such was the case for the statement dealt with in Table 37. The overall mean response to this statement was 3.68, which according to the reversed scale for negative statements, would be a disagree response. Thus, the respondents disagreed with the statement that most students who take vocational education courses are slow learners and come from low income families.

The average response ranged from 3.83 for skilled and unskilled workers to 3.54 for those in semi-skilled occupations.

TABLE 37

SUMMARY OF RESPONSES TO THE STATEMENT, "MOST STUDENTS WHO TAKE VOCATIONAL EDUCATION COURSES ARE SLOW LEARNERS AND COME FROM LOW INCOME FAMILIES."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.00 | 3.50 | 3.00 | 4.00 | 3.50 | 3.75 | 3.63 |
| Technical | 3.75 | 4.00 | 3.00 | 4.00 | 3.50 | 3.25 | 3.58 |
| Skilled | 3.25 | 4.25 | 4.25 | 4.00 | 3.75 | 3.50 | 3.83 |
| Semi-skilled | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.75 | 3.54 |
| Unskilled | 4.25 | 3.75 | 3.25 | 4.25 | 3.75 | 3.75 | 3.83 |
| Grand $\bar{X}$ by Site | 3.75 | 3.80 | 3.40 | 3.95 | 3.60 | 3.60 | |

Table 38 contains data obtained as a result of testing the mean responses from Table 37 for significance of differences. Comparisons of all sources of possible variation failed to yield any differences among mean responses which could be judged significant at the .05 level of probability.

TABLE 38

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "MOST STUDENTS WHO TAKE VOCATIONAL EDUCATION COURSES ARE SLOW LEARNERS AND COME FROM LOW INCOME FAMILIES."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 1.88 | .47 | .45 |
| Interview Sites | 5 | 3.67 | .73 | .71 |
| Interaction of Categories and Sites | 20 | 8.92 | .45 | .43 |
| Within Groups | 90 | 93.50 | 1.04 | |
| Total | 119 | 107.97 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

The data in Table 39 were collected by a negative statement, but responses to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a negative to a positive connotation. The overall mean response to this statement was 4.11, which according to the reversed scale for negative statements, would be a disagree response. Thus, the respondents disagreed with the statement that academically talented students, even though interested in the area, should be discouraged from enrolling in vocational education programs. The average response ranged from 4.33 for professional workers to 3.92 for those in unskilled occupations.

TABLE 39

SUMMARY OF RESPONSES TO THE STATEMENT, "ACADEMICALLY TALENTED STUDENTS, EVEN THOUGH INTERESTED IN THE AREA, SHOULD BE DISCOURAGED FROM ENROLLING IN VOCATIONAL EDUCATION PROGRAMS."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 5.00 | 4.75 | 3.25 | 4.50 | 4.25 | 4.25 | 4.33 |
| Technical | 4.50 | 4.25 | 4.25 | 4.25 | 4.00 | 4.00 | 4.21 |
| Skilled | 4.25 | 3.75 | 4.25 | 4.00 | 4.50 | 3.75 | 4.08 |
| Semi-skilled | 4.25 | 3.75 | 4.25 | 4.00 | 4.25 | 3.50 | 4.00 |
| Unskilled | 3.50 | 4.50 | 3.75 | 3.50 | 4.25 | 4.00 | 3.92 |
| Grand $\bar{X}$ by Site | 4.30 | 4.20 | 3.95 | 4.05 | 4.25 | 3.90 | |

Inspection of Table 40 reveals that there were no significant differences among the mean responses by occupational categories and interview sites relative to the statement that academically talented students, even though interested in the area, should be discouraged from enrolling in vocational education programs.

In order to assess the respondents' overall opinion regarding student ability levels, Table 41 was developed. These data represent a summary of the mean responses by occupational categories and interview sites to the statements encompassed in Tables 29, 31, 33, 35, 37 and 39. The entire group of interviewees expressed a mean

response of 3.82 or agree and the mean response of each occupational category was of the same type, ranging from a low of 3.76 for the skilled category to a high of 3.90 for the professionals. Professional workers at Watonga responded at the 3.21 or neutral level, but all others responded agree.

TABLE 40

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "ACADEMICALLY TALENTED STUDENTS, EVEN THOUGH INTERESTED IN THE AREA, SHOULD BE DISCOURAGED FROM ENROLLING IN VOCATIONAL EDUCATION PROGRAMS."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 2.63 | .66 | 1.76 |
| Interview Sites | 5 | 2.74 | .55 | 1.46 |
| Interaction of Categories and Sites | 20 | 12.47 | .62 | 1.66 |
| Within Groups | 90 | 33.75 | .38 | |
| Total | 119 | 51.59 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

TABLE 41

OVERALL SUMMARY OF RESPONSES RELATIVE TO STATEMENTS REGARDING STUDENT ABILITY LEVELS (RESEARCH OBJECTIVE 3)

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.29 | 3.88 | 3.21 | 4.21 | 3.96 | 3.88 | 3.90 |
| Technical | 3.88 | 3.96 | 3.67 | 4.00 | 3.88 | 3.58 | 3.83 |
| Skilled | 3.54 | 3.96 | 3.88 | 3.71 | 3.88 | 3.63 | 3.76 |
| Semi-skilled | 3.88 | 3.63 | 3.79 | 3.75 | 3.96 | 3.71 | 3.78 |
| Unskilled | 3.71 | 4.08 | 3.71 | 3.83 | 3.96 | 3.63 | 3.82 |
| Grand $\bar{X}$ by Site | 3.86 | 3.90 | 3.65 | 3.90 | 3.92 | 3.68 | |

All responses collected relative to the perception regarding student ability levels were subjected to analysis of variance to determine if significant differences existed among the mean responses. Results of these tests are offered in Table 42. Inspection of this table reveals that when comparisons were made among occupational categories and interview sites, significant differences did not exist.

TABLE 42

SUMMARY ANALYSIS OF VARIANCE OF RESPONSES RELATIVE TO STATEMENTS REGARDING STUDENT ABILITY LEVELS

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 9.75 | 2.44 | .48 |
| Interview Sites | 5 | 52.47 | 10.49 | 2.08 |
| Interaction of Categories and Sites | 20 | 123.94 | 6.20 | 1.23 |
| Within Groups | 90 | 453.00 | 5.03 | |
| Total | 119 | 639.16 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

## Needs of Local Industry

The following section contains a group of four statements included in the study for the purpose of determining whether the public perceived that vocational education programs work with and are aligned with the needs of local industry. Findings relative to this statement are reported in this section.

Participants in the study were asked to express their opinion as to whether good vocational education programs aid in attracting new industries to an area. The group mean response to this statement, as reported in Table 43, was 3.98, which indicated they agreed that such programs were needed. The range of group mean responses was

from 3.67 for the semi-skilled category to 4.08 for technical. By interview site, respondents at Guthrie (4.10) were most in agreement with the statement while those at Enid and Watonga were least in agreement (3.75). Unskilled workers at Enid responded at the lowest level (2.75) while the skilled category at Guthrie responded at the 4.75 or strongly agree level.

TABLE 43

SUMMARY OF RESPONSES TO THE STATEMENT, "GOOD VOCATIONAL EDUCATION PROGRAMS AID IN ATTRACTING NEW INDUSTRIES TO AN AREA."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 4.00 | 3.50 | 3.50 | 4.00 | 4.00 | 4.00 | 3.83 |
| Technical | 4.25 | 4.25 | 4.00 | 3.50 | 4.25 | 4.25 | 4.08 |
| Skilled | 4.00 | 4.75 | 3.50 | 4.00 | 4.00 | 4.00 | 4.04 |
| Semi-skilled | 3.75 | 3.50 | 3.75 | 3.50 | 3.75 | 3.75 | 3.67 |
| Unskilled | 2.75 | 4.50 | 4.00 | 4.00 | 3.75 | 3.50 | 3.75 |
| Grand $\bar{X}$ by Site | 3.75 | 4.10 | 3.75 | 3.80 | 3.95 | 3.90 | |

Inspection of Table 44 reveals that there were no significant differences among the mean responses by occupational categories and

interview sites relative to vocational education programs aiding in attracting new industries to an area.

TABLE 44

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "GOOD VOCATIONAL EDUCATION PROGRAMS AID IN ATTRACTING NEW INDUSTRIES TO AN AREA."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 3.17 | .79 | 1.37 |
| Interview Sites | 5 | 1.88 | .38 | .65 |
| Interaction of Categories and Sites | 20 | 11.83 | .59 | 1.02 |
| Within Groups | 90 | 52.25 | .58 | |
| Total | 119 | 69.13 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Another negative statement is reported in Table 45, but responses to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a negative to a positive connotation. The overall mean response to this statement was a 2.23, which according to the reversed scale for negative statements, would be an agree response. Thus, the respondents agreed that business and industry are often not informed sufficiently

about vocational and technical education offerings available to train or retrain workers. The average response ranged from 2.42 for professional workers to 2.08 for those in skilled occupations.

TABLE 45

SUMMARY OF RESPONSES TO THE STATEMENT, "BUSINESS AND INDUSTRY ARE OFTEN NOT INFORMED SUFFICIENTLY ABOUT VOCATIONAL AND TECHNICAL EDUCATION OFFERINGS AVAILABLE TO TRAIN OR RETRAIN WORKERS."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 2.00 | 2.00 | 2.25 | 2.75 | 2.75 | 2.75 | 2.42 |
| Technical | 1.75 | 2.50 | 2.00 | 2.00 | 2.50 | 2.50 | 2.21 |
| Skilled | 2.00 | 2.00 | 2.25 | 2.50 | 1.75 | 2.00 | 2.08 |
| Semi-skilled | 2.50 | 2.50 | 2.00 | 2.25 | 1.75 | 2.00 | 2.17 |
| Unskilled | 2.75 | 3.00 | 1.75 | 2.00 | 1.75 | 2.25 | 2.25 |
| Grand $\bar{X}$ by Site | 2.20 | 2.40 | 2.05 | 2.30 | 2.10 | 2.30 | |

Table 46 contains data obtained as a result of testing the mean responses from Table 45 for significance of differences. Comparison of all sources of possible variation failed to yield any differences among mean responses which could be judged significant at the .05 level of probability.

TABLE 46

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "BUSINESS AND INDUSTRY ARE OFTEN NOT INFORMED SUFFICIENTLY ABOUT VOCATIONAL AND TECHNICAL EDUCATION OFFERINGS AVAILABLE TO TRAIN OR RETRAIN WORKERS."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 1.64 | .41 | .77 |
| Interview Sites | 5 | 1.68 | .34 | .64 |
| Interaction of Categories and Sites | 20 | 15.04 | .75 | 1.41 |
| Within Groups | 90 | 47.43 | .53 | |
| Total | 119 | 65.79 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

As pointed out earlier, certain statements were purposely formulated in a negative fashion, but responses to these were compared to those of positive-oriented statements. For this reason, it was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing these statements from a negative to a positive connotation. Such was the case for the statement dealt with in Table 47. The overall mean response to this statement was 2.97, which according to the reversed scale for negative statements, would be a neutral response. Thus, the respondents were neutral to the statement vocational education programs are often not kept up-to-date with the needs of business and industry. The average

response ranged from 3.08 for semi-skilled workers to 2.88 for those in professional occupations.

TABLE 47

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION PROGRAMS ARE OFTEN NOT KEPT UP-TO-DATE WITH THE NEEDS OF BUSINESS AND INDUSTRY."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 2.50 | 3.00 | 2.50 | 3.00 | 2.75 | 3.50 | 2.88 |
| Technical | 2.25 | 3.50 | 2.75 | 2.75 | 4.00 | 2.25 | 2.92 |
| Skilled | 3.50 | 3.25 | 2.50 | 3.50 | 2.50 | 2.50 | 2.96 |
| Semi-skilled | 3.00 | 3.25 | 3.00 | 2.25 | 3.50 | 3.50 | 3.08 |
| Unskilled | 3.00 | 3.25 | 2.50 | 3.25 | 3.00 | 3.00 | 3.00 |
| Grand $\bar{X}$ by Site | 2.85 | 3.25 | 2.65 | 2.95 | 3.15 | 2.95 | |

Inspection of Table 48 reveals that there were no significant differences among the mean responses by occupational categories and interview sites relative to vocational education programs not being kept up-to-date with the needs of business and industry.

TABLE 48

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION PROGRAMS ARE OFTEN NOT KEPT UP-TO-DATE WITH THE NEEDS OF BUSINESS AND INDUSTRY."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 4.05 | 1.01 | 1.44 |
| Interview Sites | 5 | 3.50 | .70 | .99 |
| Interaction of Categories and Sites | 20 | 15.75 | .79 | 1.12 |
| Within Groups | 90 | 63.50 | .71 | |
| Total | 119 | 86.80 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

As detailed in Table 49 persons comprising all occupational categories and in all interview sites were of the opinion that area vocational-technical schools should enable students to have more opportunities for training to meet industrial needs. Those in the semi-skilled category expressed the highest mean response of 4.08, but the other groups' responses were only slightly below this, with the mean response of all groups falling into the agree category. Professional workers at Watonga and skilled workers at Enid responded in a neutral fashion. Taken as a whole, the interviewees from Kingfisher exhibited the highest mean level of agreement, 4.10, while the 3.80 mean response from the Watonga group was the lowest.

TABLE 49

SUMMARY OF RESPONSES TO THE STATEMENT, "AREA VOCATIONAL-TECHNICAL SCHOOLS SHOULD ENABLE STUDENTS TO HAVE MORE OPPORTUNITIES FOR TRAINING TO MEET INDUSTRIAL NEEDS."

| Occupational Category | $\bar{X}$ Response by Interview Site → Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| Professional | 4.50 | 3.50 | 3.00 | 4.25 | 3.75 | 4.25 | 3.88 |
| Technical | 4.25 | 4.00 | 3.50 | 4.25 | 4.00 | 4.00 | 4.00 |
| Skilled | 3.25 | 4.00 | 4.25 | 3.75 | 4.00 | 3.75 | 3.83 |
| Semi-skilled | 4.25 | 4.00 | 4.25 | 4.00 | 4.00 | 4.00 | 4.08 |
| Unskilled | 4.00 | 4.00 | 4.00 | 4.25 | 4.00 | 3.75 | 4.00 |
| Grand $\bar{X}$ by Site | 4.05 | 3.90 | 3.80 | 4.10 | 3.95 | 3.95 | |

Analysis of variance of the data reported in Table 50 disclosed that respondents in the various interview sites did not differ significantly in their opinions. The F values were found to be below the level required to be significant at the .05 level of confidence.

TABLE 50

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "AREA VOCATIONAL-TECHNICAL SCHOOLS SHOULD ENABLE STUDENTS TO HAVE MORE OPPORTUNITIES FOR TRAINING TO MEET INDUSTRIAL NEEDS."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 1.00 | .25 | .84 |
| Interview Sites | 5 | 1.14 | .23 | .77 |
| Interaction of Categories and Sites | 20 | 9.90 | .49 | 1.67 |
| Within Groups | 90 | 26.75 | .30 | |
| Total | 119 | 38.79 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

In order to assess the respondents' overall opinion regarding needs of local industry, Table 51 was developed. These data represent a summary of the mean responses by occupational categories and interview sites to the statements encompassed in Tables 43, 45, 47 and 49. The entire group of interviewees expressed a mean response of 3.26 or neutral and the mean response of each occupational category was of the same type, ranging from a low of 3.21 for the semi-skilled category to a high of 3.30 for the technical group. All interview sites had a mean response of neutral.

TABLE 51

OVERALL SUMMARY OF RESPONSES RELATIVE TO STATEMENTS REGARDING NEEDS OF LOCAL INDUSTRY (RESEARCH OBJECTIVE 4)

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 3.25 | 3.00 | 2.81 | 3.50 | 3.50 | 3.63 | 3.28 |
| Technical | 3.13 | 3.56 | 3.06 | 3.13 | 3.69 | 3.25 | 3.30 |
| Skilled | 3.19 | 3.50 | 3.13 | 3.44 | 3.06 | 3.06 | 3.23 |
| Semi-skilled | 3.38 | 3.31 | 3.25 | 3.00 | 3.00 | 3.31 | 3.21 |
| Unskilled | 3.13 | 3.69 | 3.06 | 3.38 | 3.13 | 3.13 | 3.25 |
| Grand $\bar{X}$ by Site | 3.22 | 3.41 | 3.06 | 3.29 | 3.28 | 3.28 | |

All responses collected relative to the perception of needs of local industry were subjected to analysis of variance to determine if significant differences existed among the mean responses. Results of these tests are offered in Table 52. Inspection of the table reveals that when comparisons were made among interview sites, significant differences did exist. The resulting F value was 6.57 which was highly significant at the .05 level of confidence. Comparisons across occupational categories and other sources of variation did not yield significant F values.

TABLE 52

SUMMARY ANALYSIS OF VARIANCE OF RESPONSES RELATIVE TO STATEMENTS REGARDING NEEDS OF LOCAL INDUSTRY

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 8.97 | 2.24 | 1.33 |
| Interview Sites | 5 | 55.37 | 11.08 | 6.57* |
| Interaction of Categories and Sites | 20 | 43.83 | 2.19 | 1.30 |
| Within Groups | 90 | 151.75 | 1.69 | |
| Total | 119 | 259.92 | | |

P .05 2.30 (with 5 and 90 degrees of freedom)
*Significant at the .05 level

Education Comparisons

The statements in the following section were developed in order to determine how the public interviewed perceived vocational education in comparison to the rest of education. Mean responses to these statements and tests for significance of differences among these responses are reported in tables in this section.

The data in Table 53 were collected by a negative-type statement, but responses to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a negative to a positive connotation. The overall mean

response to this statement was 3.83, which according to the reversed scale for negative statements, would be a disagree response. Thus, the respondents disagree with the statement that it is not important to train students in vocational education in high school if they plan to attend college. The average response ranged from 3.88 for professional, technical, and skilled workers to a 3.71 for those in semi-skilled occupations.

TABLE 53

SUMMARY OF RESPONSES TO THE STATEMENT, "IT IS NOT IMPORTANT TO TRAIN STUDENTS IN VOCATIONAL EDUCATION IN HIGH SCHOOL IF THEY PLAN TO ATTEND COLLEGE."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.50 | 4.25 | 2.75 | 4.00 | 4.00 | 3.75 | 3.88 |
| Technical | 4.00 | 3.25 | 4.00 | 4.25 | 4.00 | 3.75 | 3.88 |
| Skilled | 3.25 | 4.00 | 4.00 | 4.25 | 4.25 | 3.50 | 3.88 |
| Semi-skilled | 4.00 | 3.75 | 4.25 | 4.00 | 3.25 | 3.00 | 3.71 |
| Unskilled | 3.25 | 4.50 | 3.25 | 3.50 | 4.25 | 4.00 | 3.79 |
| Grand $\bar{X}$ by Site | 3.80 | 3.95 | 3.65 | 4.00 | 3.95 | 3.60 | |

TABLE 54

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "IT IS NOT IMPORTANT TO TRAIN STUDENTS IN VOCATIONAL EDUCATION IN HIGH SCHOOL IF THEY PLAN TO ATTEND COLLEGE."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Cateogries | 4 | .80 | .20 | .39 |
| Interview Sites | 5 | 2.57 | .51 | 1.00 |
| Interaction of Categories and Sites | 20 | 20.60 | 1.03 | 2.02* |
| Within Groups | 90 | 46.00 | .51 | |
| Total | 119 | 69.97 | | |

P .05 1.68 (with 20 and 90 degrees of freedom)
*Significant at the .05 level

Results of testing data from the preceding table for significant difference are provided in Table 54. Neither the comparisons among occupational categories nor among the interview sites produced any significant differences of mean responses. However, there were significant mean differences among mean responses by occupational categories and interview sites due to the interaction effect. This interaction is represented by a lack of uniformity among response categories and was interpreted to mean there were differences among the mean responses due to the effects of those independent variables. The interaction F value for these data was found to be 2.02 which was highly significant at the .05 level of probability.

TABLE 55

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION COURSES ARE AMONG THE MOST VALUABLE COURSES A HIGH SCHOOL STUDENT CAN TAKE IN PREPARING FOR FURTHER EDUCATION."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 3.75 | 3.75 | 2.75 | 3.25 | 2.75 | 3.75 | 3.33 |
| Technical | 2.75 | 3.50 | 3.50 | 3.75 | 4.00 | 2.50 | 3.33 |
| Skilled | 3.75 | 4.00 | 3.50 | 3.25 | 3.25 | 3.00 | 3.46 |
| Semi-skilled | 3.75 | 2.75 | 4.25 | 3.75 | 4.00 | 3.25 | 3.63 |
| Unskilled | 2.75 | 4.50 | 3.75 | 4.50 | 3.25 | 3.25 | 3.67 |
| Grand $\bar{X}$ by Site | 3.35 | 3.70 | 3.55 | 3.70 | 3.45 | 3.15 | |

According to data presented in Table 55 the 120 persons interviewed for the study had a mean response of neutral (3.48) regarding the statement that vocational education courses are among the most valuable courses a high school student can take in preparing for further education. However, it should be noted that those composing the semi-skilled and unskilled categories responded at the agree level. Mean responses by interview sites ranged from a high of 3.70 for Guthrie and Kingfisher to a low of 3.15 for Ponca City.

Results of testing data from the preceding table for significant differences are provided in Table 56. Neither the comparisons among

occupational categories nor among the interview sites produced any significant differences of mean responses. However, there were significant mean differences among the responses by occupational categories and interview sites due to the interaction effect. This interaction is represented by a lack of uniformity among response categories and was interpreted to mean there were differences among the mean responses due to the effects of these independent variables. The interaction F value for these data was found to be 1.75 which was significant at the .05 level of probability.

TABLE 56

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION COURSES ARE AMONG THE MOST VALUABLE COURSES A HIGH SCHOOL STUDENT CAN TAKE IN PREPARING FOR FURTHER EDUCATION."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 2.38 | .60 | .80 |
| Interview Sites | 5 | 4.57 | .91 | 1.23 |
| Interaction of Categories and Sites | 20 | 26.02 | 1.30 | 1.75* |
| Within Groups | 90 | 67.00 | .74 | |
| Total | 119 | 99.97 | | |

P .05 1.68 (with 20 and 90 degrees of freedom)
*Significant at the .05 level

TABLE 57

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION COURSES TAKE UP SO MUCH OF A STUDENT'S TIME THAT COULD BE BETTER SPENT IN EXTRACURRICULAR ACTIVITIES (SPORTS, BAND, ETC.)."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.75 | 4.50 | 4.25 | 4.50 | 3.75 | 4.25 | 4.33 |
| Technical | 4.00 | 4.50 | 3.75 | 3.75 | 4.25 | 3.50 | 3.96 |
| Skilled | 3.75 | 4.25 | 4.00 | 4.25 | 4.00 | 4.25 | 4.08 |
| Semi-skilled | 4.00 | 3.50 | 4.00 | 3.50 | 4.00 | 4.00 | 3.83 |
| Unskilled | 4.00 | 4.50 | 3.50 | 3.50 | 4.50 | 4.00 | 4.00 |
| Grand $\bar{X}$ by Site | 4.10 | 4.25 | 3.90 | 3.90 | 4.10 | 4.00 | |

Another negative statement is reported in Table 57, but responses to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a negative to a positive connotation. The overall mean response to this statement was 4.04 which, according to the reversed scale for negative statements, would be a disagree response. Thus, the respondents disagreed with the statement that vocational education courses take up so much of student's time that could be better spent in extracurricular activities (sports, band, etc.). The average

response ranged from 4.33 for professionals to 3.83 for those in semi-skilled occupations.

TABLE 58

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION COURSES TAKE UP SO MUCH OF A STUDENT'S TIME THAT COULD BE BETTER SPENT IN EXTRACURRICULAR ACTIVITIES (SPORTS, BAND, ETC.)."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 1.53 | .38 | .86 |
| Interview Sites | 5 | 3.64 | .73 | 1.63 |
| Interaction of Categories and Sites | 20 | 11.57 | .58 | 1.29 |
| Within Groups | 90 | 40.25 | .45 | |
| Total | 119 | 56.99 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Inspection of Table 58 reveals that there were no significant differences among the mean responses by occupational categories and interview sites relative to vocational education courses taking up so much of a student's time that could be better spent in extra-curricular activities (sports, band, etc.).

According to the data summarized in Table 59, those interviewed responded at the agree level when asked whether they felt vocational

education had proved itself to be an indispensable part of the curriculum in high schools. The overall mean response to this statement was at the 3.88 or agree level. Professional workers as a group responded at the highest level, unskilled workers at the lowest. The mean response by sites ranged from 4.00 for persons at Watonga to 3.55 for those at Stillwater.

TABLE 59

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION HAS PROVED ITSELF TO BE AN INDISPENSABLE PART OF THE CURRICULUM IN HIGH SCHOOLS."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 4.00 | 3.75 | 4.25 | 4.25 | 3.75 | 4.00 | 4.00 |
| Technical | 3.50 | 4.00 | 4.25 | 4.25 | 3.75 | 3.25 | 3.83 |
| Skilled | 4.00 | 4.25 | 4.00 | 3.50 | 3.50 | 3.50 | 3.79 |
| Semi-skilled | 3.50 | 3.00 | 4.00 | 3.75 | 4.25 | 3.50 | 3.67 |
| Unskilled | 3.50 | 4.25 | 3.50 | 3.75 | 2.50 | 4.00 | 3.58 |
| Grand $\bar{X}$ by Site | 3.70 | 3.85 | 4.00 | 3.90 | 3.55 | 3.65 | |

Table 60 contains Data obtained as a result of testing the mean responses from Table 59 for significance of differences.

Comparisons of all sources of possible variation failed to yield any differences among mean responses which could be judged significant at the .05 level of probability.

TABLE 60

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION HAS PROVED ITSELF TO BE AN INDISPENSABLE PART OF THE CURRICULUM IN HIGH SCHOOLS."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 2.47 | .62 | .94 |
| Interview Sites | 5 | 2.88 | .58 | .88 |
| Interaction of Categories and Sites | 20 | 14.83 | .74 | 1.14 |
| Within Groups | 90 | 58.75 | .65 | |
| Total | 119 | 78.92 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

As pointed out earlier, certain statements were purposely formulated in a negative fashion, but responses to these were compared to those of positive-oriented statements. For this reason, it was necessary to reduce the numerical values assigned to the response categories, which had the effect of changing these statements from a negative to a positive connotation. Such was the case for the

statement dealt with in Table 61. The overall mean response to this statement was 3.45 which, according to the reversed scale for negative statements, would be a neutral response. Thus the respondents were neutral to the statement that it is more important to provide students with a sound basic education than to use the time for vocational education. The average response ranged from 3.83 for professional workers to 3.21 for those in technical occupations.

TABLE 61

SUMMARY OF RESPONSES TO THE STATEMENT, "IT IS MORE IMPORTANT TO PROVIDE STUDENTS WITH A SOUND BASIC EDUCATION THAN TO USE THE TIME FOR VOCATIONAL EDUCATION."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.75 | 3.50 | 3.75 | 3.75 | 3.75 | 3.50 | 3.83 |
| Technical | 3.25 | 3.75 | 2.75 | 3.25 | 4.00 | 2.25 | 3.21 |
| Skilled | 3.25 | 3.75 | 3.50 | 3.25 | 3.50 | 3.50 | 3.46 |
| Semi-skilled | 3.75 | 2.50 | 3.75 | 4.00 | 3.25 | 3.25 | 3.42 |
| Unskilled | 3.00 | 3.50 | 3.25 | 2.75 | 4.00 | 3.50 | 3.33 |
| Grand $\bar{X}$ by Site | 3.60 | 3.40 | 3.40 | 3.40 | 3.70 | 3.20 | |

TABLE 62

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "IT IS MORE IMPORTANT TO PROVIDE STUDENTS WITH A SOUND BASIC EDUCATION THAN TO USE THE TIME FOR VOCATIONAL EDUCATION."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 5.28 | 1.32 | 2.14 |
| Interview Sites | 5 | 3.10 | .62 | 1.01 |
| Interaction of Categories and Sites | 20 | 19.82 | .99 | 1.61 |
| Within Groups | 90 | 55.50 | .62 | |
| Total | 119 | 83.70 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Results of testing data from the preceding table for significant difference are provided in Table 62. Neither the comparisons among occupational categories nor among the interview sites produced any significant differences of mean responses.

The data in Table 63 were collected by a negative-type statement, but responses to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a negative to a positive connotation. The overall mean response to this statement was 3.54 which, according to the reversed scale for negative statements, would be a disagree response.

Thus, the respondents disagreed with the statement that students interested in a vocational education course should attend an area vocational-technical or trade school rather than a regular high school. The average response ranged from 3.79 for technical workers to 3.17 for those in professional occupations.

TABLE 63

SUMMARY OF RESPONSES TO THE STATEMENT, "STUDENTS INTERESTED IN A VOCATIONAL EDUCATION COURSE SHOULD ATTEND AN AREA VOCATIONAL-TECHNICAL OR TRADE SCHOOL RATHER THAN A REGULAR HIGH SCHOOL."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 3.25 | 3.25 | 3.00 | 3.50 | 3.00 | 3.00 | 3.17 |
| Technical | 3.75 | 4.00 | 4.00 | 4.00 | 3.75 | 3.25 | 3.79 |
| Skilled | 3.00 | 3.25 | 4.00 | 3.50 | 4.25 | 3.75 | 3.63 |
| Semi-skilled | 3.50 | 3.25 | 3.75 | 3.50 | 3.25 | 4.00 | 3.54 |
| Unskilled | 4.00 | 3.25 | 3.50 | 3.75 | 4.00 | 3.00 | 3.58 |
| Grand $\bar{X}$ by Site | 3.50 | 3.40 | 3.65 | 3.65 | 3.65 | 3.40 | |

Table 64 contains data obtained as a result of testing the mean responses from Table 63 for significance of differences. Comparisons of all sources of possible variation failed to yield any differences

among mean responses which could be judged significant at the .05 level of probability.

TABLE 64

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "STUDENTS INTERESTED IN A VOCATIONAL EDUCATION COURSE SHOULD ATTEND AN AREA VOCATIONAL-TECHNICAL OR TRADE SCHOOL RATHER THAN A REGULAR HIGH SCHOOL."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 5.75 | 1.44 | 1.64 |
| Interview Sites | 5 | 2.94 | .59 | .67 |
| Interaction of Categories and Sites | 20 | 8.35 | .42 | .48 |
| Within Groups | 90 | 78.75 | .88 | |
| Total | 119 | 95.79 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

In order to assess the respondents' overall opinion toward vocational education in comparison to the rest of the educational system, Table 65 was developed. These data represent a summary of the mean responses by occupational categories and interview sites to the statements encompassed in Tables 53, 55, 57, 59, 61 and 63. The entire group of interviewees expressed a mean response of 3.68 or agree and the mean response of each occupational category was of

the same type, ranging from a low of 3.62 for the semi-skilled category to a high of 3.73 for the professional and skilled groups. Those interviewed at Ponca City, with their mean response of 3.48, were neutral concerning vocational education in comparison to the rest of the educational system; however, those in the remainder of the interview sites responded agree or favorable in this regard.

TABLE 65

OVERALL SUMMARY OF RESPONSES RELATIVE TO STATEMENTS REGARDING VOCATIONAL EDUCATION IN COMPARISON TO THE REST OF EDUCATION (RESEARCH OBJECTIVE 5)

| Occupational Category | $\bar{X}$ response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 4.17 | 3.83 | 3.29 | 3.88 | 3.50 | 3.71 | 3.73 |
| Technical | 3.54 | 3.83 | 3.71 | 3.88 | 3.96 | 3.08 | 3.67 |
| Skilled | 3.50 | 3.92 | 3.83 | 3.75 | 3.79 | 3.58 | 3.73 |
| Semi-skilled | 3.75 | 3.13 | 4.00 | 3.75 | 3.68 | 3.42 | 3.62 |
| Unskilled | 3.42 | 4.08 | 3.46 | 3.63 | 3.75 | 3.63 | 3.66 |
| Grand $\bar{X}$ by Site | 3.67 | 3.76 | 3.66 | 3.77 | 3.73 | 3.48 | |

All responses collected relative to the perception of vocational education in comparison to the rest of the education were subjected

to analysis of variance to determine if significant differences existed among the mean responses. Results of these tests are offered in Table 66. Inspection of this table reveals that when comparisons were made among occupational categories and interview sites, no significant differences existed.

TABLE 66

SUMMARY ANALYSIS OF VARIANCE OF RESPONSES RELATIVE TO STATEMENTS REGARDING VOCATIONAL EDUCATION IN COMPARISON TO THE REST OF EDUCATION

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 8.00 | 2.00 | .29 |
| Interview Sites | 5 | 41.17 | 8.23 | 1.19 |
| Interaction of Categories and Sites | 20 | 226.99 | 11.35 | 1.64 |
| Within Groups | 90 | 623.00 | 6.92 | |
| Total | 119 | 899.16 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Vocational Education's Major Purpose

Another group of statements was developed in order to determine if the public interviewed perceived that vocational education was adequately accomplishing its major purpose. Mean responses to these

statements and tests for significance of differences among these responses are reported in tables in this section.

TABLE 67

SUMMARY OF RESPONSES TO THE STATEMENT, "PRESENT VOCATIONAL EDUCATION PROGRAMS CONTRIBUTE A GREAT DEAL TO THE ABILITY OF A HIGH SCHOOL GRADUATE TO FIND AND HOLD A JOB."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 5.00 | 4.50 | 4.00 | 4,50 | 4.00 | 4.00 | 4.33 |
| Technical | 4.50 | 4.50 | 4.50 | 4.25 | 5.00 | 4.25 | 4.50 |
| Skilled | 4.25 | 5.00 | 4.25 | 4.25 | 4.50 | 4.25 | 4.42 |
| Semi-skilled | 4.00 | 4.00 | 4.00 | 3.75 | 4.75 | 3.50 | 4.00 |
| Unskilled | 4.00 | 4.50 | 4.25 | 4.25 | 4.50 | 4.25 | 4.29 |
| Grand $\bar{X}$ by Site | 4.35 | 4.50 | 4.20 | 4.20 | 4.55 | 4.05 | |

Participants in the study were asked to express their opinion to the statement that vocational education programs contribute a great deal to the ability of a high school graduate to find and hold a job. The group mean response to this statement, as reported in Table 67, was 4.31, which indicated they agreed that such programs were beneficial. The range of group mean responses was from 4.00 for the

semi-skilled category to 4.50 for technical. By interview site respondents at Stillwater (4.55) were most in agreement with the statement while those at Ponca City were least in agreement (4.05).

TABLE 68

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "PRESENT VOCATIONAL EDUCATION PROGRAMS CONTRIBUTE A GREAT DEAL TO THE ABILITY OF A HIGH SCHOOL GRADUATE TO FIND AND HOLD A JOB."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 2.37 | .59 | 1.73 |
| Interview Sites | 5 | 3.98 | .80 | 2.33* |
| Interaction of Categories and Sites | 20 | 7.23 | .36 | 1.06 |
| Within Groups | 90 | 30.75 | .34 | |
| Total | 119 | 44.32 | | |

P .05 2.30 (wirh 5 and 90 degrees of freedom)
*Significant at the .05 level

Analysis of variance of the data reported in Table 68 disclosed that respondents in the various interview sites differed significantly in their opinions. The associated F value of 2.33 was found to be significant at the .05 level of confidence. Comparison of other possible sources of variation did not result in significant differences.

TABLE 69

SUMMARY OF RESPONSES TO THE STATEMENT, "THERE ARE CURRENTLY ENOUGH STUDENTS IN VOCATIONAL EDUCATION AT THE HIGH SCHOOL LEVEL."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.25 | 3.00 | 3.50 | 4.00 | 4.25 | 3.25 | 3.71 |
| Technical | 3.50 | 3.25 | 3.25 | 3.25 | 3.25 | 3.75 | 3.38 |
| Skilled | 3.50 | 4.00 | 3.75 | 3.25 | 4.00 | 3.50 | 3.67 |
| Semi-skilled | 3.50 | 2.50 | 3.50 | 3.50 | 3.25 | 3.25 | 3.25 |
| Unskilled | 3.75 | 3.50 | 2.50 | 3.00 | 4.00 | 3.50 | 3.38 |
| Grand $\bar{X}$ by Site | 3.70 | 3.25 | 3.30 | 3.40 | 3.75 | 3.45 | |

Another negative statement is reported in Table 69, but responses to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a negative to a positive connotation. The overall response to this statement was 3.48 which, according to the reversed scale for negative statements would be a neutral response. Thus, the respondents were neutral concerning whether there are currently enough students in vocational education at the high school level. The average response ranged from 3.71 for professionals to 3.25 for those in semi-skilled

occupations.

TABLE 70

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "THERE ARE CURRENTLY ENOUGH STUDENTS IN VOCATIONAL EDUCATION AT THE HIGH SCHOOL LEVEL."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 3.88 | .97 | 1.44 |
| Interview Sites | 5 | 4.28 | .86 | 1.27 |
| Interaction of Categories and Sites | 20 | 13.02 | .65 | .96 |
| Within Groups | 90 | 60.75 | .68 | |
| Total | 119 | 81.92 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Table 70 contains data obtained as a result of testing the mean responses from Table 69 for significance of differences. Comparisons of all sources of possible variation failed to yield any differences among mean responses which could be judged significant at the .05 level of probability.

According to data presented in Table 71 the 120 persons interviewed for the study had a mean response of agree (3.67) with regard to vocational education being a major answer to the problems of

unemployment. However, it should be noted that those comprising the unskilled category responded at the neutral level. Mean responses by interview sites ranged from a high of 3.95 for Guthrie to a low of 3.40 for Enid and Ponca City.

TABLE 71

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION IS A MAJOR ANSWER TO THE PROBLEMS OF UNEMPLOYMENT."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 4.00 | 4.25 | 3.50 | 4.00 | 3.00 | 3.50 | 3.71 |
| Technical | 3.25 | 4.00 | 3.75 | 4.00 | 4.25 | 4.00 | 3.88 |
| Skilled | 3.00 | 4.25 | 3.50 | 3.75 | 4.25 | 3.75 | 3.75 |
| Semi-skilled | 3.50 | 3.50 | 4.50 | 4.00 | 3.75 | 3.25 | 3.75 |
| Unskilled | 3.25 | 3.75 | 3.50 | 3.50 | 3.00 | 2.50 | 3.25 |
| Grand $\bar{X}$ by Site | 3.40 | 3.95 | 3.75 | 3.85 | 3.65 | 3.40 | |

Table 72 contains data resulting from the testing the mean responses in Table 71 for significance of differences. The calculated F values were below the level required in order to be significant at the .05 level.

TABLE 72

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION IS A MAJOR ANSWER TO THE PROBLEMS OF UNEMPLOYMENT."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 5.58 | 1.40 | 1.70 |
| Interview Sites | 5 | 5.27 | 1.03 | 1.28 |
| Interaction of Categories and Sites | 20 | 13.82 | .69 | .84 |
| Within Groups | 90 | 74.00 | .82 | |
| Total | 119 | 98.67 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

As detailed in Table 73 persons comprising all occupational categories and in all interview sites were of the opinion that vocational education courses contribute a great deal to the ability of a high school graduate to find and hold a job. Those in the unskilled category expressed the highest mean response of 4.13, but the other groups' responses were only slightly below this, with the mean response of all groups falling into the agree category. Taken as a whole, the interviewees from Guthrie exhibited the highest mean level of agreement, 4.25, while the 3.95 mean response from the Enid group was the lowest.

TABLE 73

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION COURSES CONTRIBUTE A GREAT DEAL TO THE ABILITY OF A HIGH SCHOOL GRADUATE TO FIND AND HOLD A JOB."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 4.25 | 4.25 | 3.50 | 4.25 | 3.50 | 4.50 | 4.04 |
| Technical | 3.50 | 4.50 | 4.50 | 4.25 | 4.25 | 3.50 | 4.08 |
| Skilled | 3.75 | 4.25 | 4.00 | 4.00 | 4.25 | 4.00 | 4.04 |
| Semi-skilled | 4.25 | 3.75 | 4.25 | 3.50 | 4.50 | 4.00 | 4.04 |
| Unskilled | 4.00 | 4.50 | 4.25 | 4.50 | 3.50 | 4.00 | 4.13 |
| Grand $\bar{X}$ by Site | 3.95 | 4.25 | 4.10 | 4.10 | 4.00 | 4.00 | |

Inspection of Table 74 reveals that there were no significant differences among the mean responses by occupational categories and interview sites relative to vocational education courses contributing a great deal to the ability of a high school graduate to find and hold a job.

TABLE 74

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION COURSES CONTRIBUTE A GREAT DEAL TO THE ABILITY OF A HIGH SCHOOL GRADUATE TO FIND AND HOLD A JOB."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | .13 | .03 | .08 |
| Interview Sites | 5 | 1.17 | .23 | .57 |
| Interaction of Categories and Sites | 20 | 13.17 | .66 | 1.60 |
| Within Groups | 90 | 37.00 | .41 | |
| Total | 119 | 51.47 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

According to the data summarized in Table 75, those interviewed responded at the agree level when ask whether they felt vocational education programs could be designed to benefit all high school students. Skilled workers as a group responded at the highest level, semi-skilled workers at the lowest. The mean response by sites ranged from 4.20 for persons at Enid to 3.70 for those at Ponca City.

TABLE 75

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION PROGRAMS CAN BE DESIGNED TO BENEFIT ALL HIGH SCHOOL STUDENTS."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 4.50 | 3.50 | 3.75 | 4.25 | 3.50 | 4.25 | 3.96 |
| Technical | 4.00 | 3.75 | 4.25 | 4.25 | 4.00 | 3.00 | 3.88 |
| Skilled | 4.50 | 4.25 | 4.00 | 3.75 | 4.50 | 3.50 | 4.08 |
| Semi-skilled | 4.00 | 3.75 | 4.00 | 4.25 | 3.25 | 3.75 | 3.83 |
| Unskilled | 4.00 | 4.50 | 4.25 | 4.00 | 3.50 | 4.00 | 4.04 |
| Grand $\bar{X}$ by Site | 4.20 | 3.95 | 4.05 | 4.10 | 3.75 | 3.70 | |

Results of testing data from the preceding table for significant difference are provided in Table 76. Neither the comparisons among occupational categories nor among the interview sites produced any significant differences of mean responses.

As previously mentioned, certain statements were purposely formulated in a negative fashion, but responses to these were compared to those of positive-oriented statements. For this reason, it was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing these statements from a negative to a positive connotation. Such was the

case for the statement dealt with in Table 77. The overall mean response to this statement was 3.50 which, according to the reversed scale for negative statements, would be a disagree response. Thus, the respondents disagreed with the statement that students should not be allowed in vocational education courses until they reach the junior or senior level in high school. The average response ranged from 3.88 for professional workers to 3.21 for those in technical occupations.

TABLE 76

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL EDUCATION PROGRAMS CAN BE DESIGNED TO BENEFIT ALL HIGH SCHOOL STUDENTS."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 1.08 | .27 | .58 |
| Interview Sites | 5 | 3.94 | .79 | 1.70 |
| Interaction of Categories and Sites | 20 | 12.02 | .60 | 1.30 |
| Within Groups | 90 | 41.75 | .46 | |
| Total | 119 | 58.79 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

TABLE 77

SUMMARY OF RESPONSES TO THE STATEMENT, "STUDENTS SHOULD NOT BE ALLOWED IN VOCATIONAL EDUCATION COURSES UNTIL THEY REACH THE JUNIOR OR SENIOR LEVEL IN HIGH SCHOOL."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.00 | 3.50 | 3.75 | 4.25 | 3.75 | 4.00 | 3.88 |
| Technical | 2.75 | 3.50 | 4.00 | 3.75 | 3.25 | 2.00 | 3.21 |
| Skilled | 3.50 | 4.00 | 4.00 | 3.00 | 4.50 | 2.50 | 3.58 |
| Semi-skilled | 3.75 | 3.50 | 3.50 | 3.50 | 3.25 | 4.00 | 3.58 |
| Unskilled | 2.50 | 4.25 | 2.75 | 3.00 | 4.25 | 2.75 | 3.25 |
| Grand $\bar{X}$ by Site | 3.30 | 3.75 | 3.60 | 3.50 | 3.80 | 3.05 | |

Results of testing data from the preceding table for significant difference are provided in Table 78. Neither the comparisons among occupational categories nor among the interview sites produced any significant differences of mean responses. However, there were significant mean differences among mean responses by occupational categories and interview sites due to the interaction effect. This interaction is represented by a lack of uniformity among response categories and was interpreted to mean there were differences among the mean responses due to the effects of these independent variables. The interaction F value for these data was found to be 2.37 which

TABLE 78

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "STUDENTS SHOULD NOT BE ALLOWED IN VOCATIONAL EDUCATION COURSES UNTIL THEY REACH THE JUNIOR OR SENIOR LEVEL IN HIGH SCHOOL."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 3.58 | .90 | 1.22 |
| Interview Sites | 5 | 5.70 | 1.14 | 1.55 |
| Interaction of Categories and Sites | 20 | 34.72 | 1.74 | 2.37* |
| Within Groups | 90 | 66.00 | .73 | |
| Total | 119 | 110.00 | | |

P .05 1.68 (with 20 and 90 degrees of freedom)
*Significant at the .05 level

In order to assess the respondents' overall opinion as to whether vocational education was adequately accomplishing its major purpose, Table 79 was developed. These data represent a summary of the mean responses by occupational categories and interview sites to the statements encompassed in Tables 67, 69, 71, 73, 75 and 77. The entire group of interviewees expressed a mean response of 3.87 or agree and the mean response of each occupational category was of the same type, rnaging from a low of 3.72 for the unskilled category to a high of 3.91 for the professional and skilled workers. All interview sites were in agreement that vocational education was adequately

accomplishing its major purpose. Technical workers at Ponca City responded at the 3.42 or neutral level.

TABLE 79

OVERALL SUMMARY OF RESPONSES RELATIVE TO STATEMENTS REGARDING VOCATIONAL EDUCATION'S MAJOR PURPOSE (RESEARCH OBJECTIVE 6)

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 4.33 | 3.83 | 3.67 | 4.21 | 3.50 | 3.92 | 3.91 |
| Technical | 3.75 | 3.92 | 4.04 | 3.96 | 4.00 | 3.42 | 3.85 |
| Skilled | 3.75 | 4.29 | 3.83 | 3.67 | 4.33 | 3.58 | 3.91 |
| Semi-skilled | 3.83 | 3.54 | 4.00 | 3.83 | 3.79 | 3.63 | 3.77 |
| Unskilled | 3.58 | 4.17 | 3.58 | 3.71 | 3.79 | 3.50 | 3.72 |
| Grand $\bar{X}$ by Site | 3.85 | 3.95 | 3.83 | 3.88 | 3.88 | 3.61 | |

All responses collected relative to the perception of vocational education adequately accomplishing its major purpose were subjected to analysis of variance to determine if significant differences existed among the mean responses. Results of the tests are offered in Table 80. Inspection of this table reveals that when comparisons were made among occupational categories and interview sites, significant

differences did not exist.

TABLE 80

SUMMARY ANALYSIS OF VARIANCE OF RESPONSES RELATIVE TO STATEMENTS REGARDING VOCATIONAL EDUCATION'S MAJOR PURPOSE

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 24.28 | 6.07 | 1.15 |
| Interview Sites | 5 | 49.54 | 9.91 | 1.87 |
| Interaction of Categories and Sites | 20 | 198.41 | 9.92 | 1.87 |
| Within Groups | 90 | 476.75 | 5.30 | |
| Total | 119 | 748.98 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

## Public Knowledge Concerning Vocational Education Opportunities

A group of four statements was included in the study for the purpose of determining whether the public interviewed perceived that it was adequately informed about opportunities available in and provided by vocational education. Findings relative to this statement are reported in this section.

Participants in the study were asked to express their opinion concerning the importance of vocational education youth groups,

especially toward developing good citizenship. The group mean response to this statement, as reported in Table 81, was 4.43, which indicated they agreed that vocational education youth groups were important and did help develop good citizenship. The range of group mean responses was from 4.29 for the unskilled category to 4.54 for semi-skilled. By interview site, respondents at Guthrie (4.65) were most in agreement with the statement while those at Kingfisher were least in agreement (4.25).

TABLE 81

SUMMARY OF RESPONSES TO THE STATEMENT, "YOUTH GROUPS (FFA, FHA, VICA, DECA, AND FBLA) ARE IMPORTANT PARTS OF VOCATIONAL EDUCATION, ESPECIALLY FOR DEVELOPING GOOD CITIZENSHIP."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 4.75 | 4.50 | 4.25 | 4.75 | 3.25 | 4.75 | 4.38 |
| Technical | 4.75 | 5.00 | 4.25 | 4.75 | 4.25 | 4.00 | 4.50 |
| Skilled | 4.00 | 4.75 | 4.50 | 4.25 | 4.50 | 4.50 | 4.42 |
| Semi-skilled | 4.75 | 4.50 | 4.25 | 4.25 | 4.50 | 5.00 | 4.54 |
| Unskilled | 4.00 | 4.50 | 4.50 | 3.25 | 5.00 | 4.50 | 4.29 |
| Grand $\bar{X}$ by Site | 4.45 | 4.65 | 4.35 | 4.25 | 4.30 | 4.55 | |

TABLE 82

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATMENT, "YOUTH GROUPS (FFA, FHA, VICA, DECA, AND FBLA) ARE IMPORTANT PARTS OF VOCATIONAL EDUCATION, ESPECIALLY FOR DEVELOPING GOOD CITIZENSHIP."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | .75 | .19 | .57 |
| Interview Sites | 5 | 2.77 | .55 | 1.69 |
| Interaction of Categories and Sites | 20 | 18.15 | .91 | 2.77* |
| Within Groups | 90 | 29.50 | .33 | |
| Total | 119 | 51.17 | | |

P .05 1.68 (with 20 and 90 degrees of freedom)
*Significant at the .05 level

Results of testing data from the preceding table for significant difference are provided in Table 82. Neither the comparisons among occupational categories nor among the interview sites produced any significant differences of mean responses. However, there were significant mean differences among mean responses by occupational categories and interview sites due to the interaction effect. This interaction is represented by a lack of uniformity among response categories and was interpreted to mean there were differences among the mean responses due to the effects of these independent variables. The interaction F value for these data was found to be 2.77 which was

highly significant at the .05 level of probability.

TABLE 83

SUMMARY OF RESPONSES TO THE STATEMENT, "VOCATIONAL PERSONNEL ARE DOING AN ADEQUATE JOB OF INFORMING PARENTS OF THE IMPORTANCE AND VALUE OF VOCATIONAL EDUCATION."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 2.25 | 3.50 | 2.75 | 3.00 | 2.25 | 2.25 | 2.67 |
| Technical | 2.25 | 3.00 | 3.00 | 2.75 | 2.75 | 2.75 | 2.75 |
| Skilled | 3.50 | 2.50 | 2.75 | 2.50 | 2.50 | 2.50 | 2.71 |
| Semi-skilled | 2.75 | 3.00 | 3.50 | 2.75 | 3.00 | 3.25 | 3.04 |
| Unskilled | 3.25 | 3.00 | 2.50 | 2.75 | 2.25 | 2.50 | 2.71 |
| Grand $\bar{X}$ by Site | 2.80 | 3.00 | 2.90 | 2.75 | 2.55 | 2.65 | |

According to data presented in Table 83, the 120 persons interviewed for the study had a mean response of neutral (2.78) regarding the statement that vocational personnel are doing an adequate job of informing parents of the importance and value of vocational education. The mean responses for all occupational categories and interview sites were in the neutral range.

TABLE 84

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "VOCATIONAL PERSONNEL ARE DOING AN ADEQUATE JOB OF INFORMING PARENTS OF THE IMPORTANCE AND VALUE OF VOCATIONAL EDUCATION."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 2.78 | .70 | .70 |
| Interview Sites | 5 | 2.67 | .53 | .54 |
| Interaction of Categories and Sites | 20 | 11.42 | .57 | .57 |
| Within Groups | 90 | 89.50 | .99 | |
| Total | 119 | 106.37 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

Table 84 contains data obtained as a result of testing the mean responses from Table 83 for significance of differences. Comparisons of all sources of possible variation failed to yield any differences among mean responses which could be judged significant at the .05 level of probability.

The data in Table 85 were collected by a negative-type statement, but responses to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a negative to a positive connotation. The overall mean response to this statement was 2.80 which according to the reversed scale for

negative statements, would be a neutral response. Thus, the respondents as a group were neutral concerning the statement high school students generally do not know about opportunities available in vocational education. The average response ranged from 3.29 for technical workers to 2.38 for those in professional occupations.

TABLE 85

SUMMARY OF RESPONSES TO THE STATEMENT, "HIGH SCHOOL STUDENTS GENERALLY DO NOT KNOW ABOUT OPPORTUNITIES AVAILABLE IN VOCATIONAL EDUCATION."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 1.75 | 2.75 | 2.75 | 2.25 | 2.25 | 2.50 | 2.38 |
| Technical | 3.00 | 3.75 | 3.25 | 3.50 | 3.50 | 2.75 | 3.29 |
| Skilled | 4.00 | 2.50 | 3.00 | 2.75 | 2.00 | 2.00 | 2.71 |
| Semi-skilled | 2.25 | 2.75 | 2.75 | 2.75 | 2.75 | 2.25 | 2.58 |
| Unskilled | 3.25 | 3.00 | 2.25 | 3.75 | 3.00 | 3.00 | 3.04 |
| Grand $\bar{X}$ by Site | 2.85 | 2.95 | 2.80 | 3.00 | 2.70 | 2.50 | |

Table 86 Contains Data resulting from testing the mean responses in Table 85 for significance of differences. The only significant difference in responses at the .05 level was found to be among the

occupational categories as indicated by the F value of 3.88.

TABLE 86

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATMENT, "HIGH SCHOOL STUDENTS GENERALLY DO NOT KNOW ABOUT OPPORTUNITIES AVAILABLE IN VOCATIONAL EDUCATION."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 11.30 | 2.83 | 3.88* |
| Interview Sites | 5 | 4.27 | .85 | 1.17 |
| Interaction of Categories and Sites | 20 | 18.90 | .94 | 1.30 |
| Within Groups | 90 | 65.50 | .73 | |
| Total | 119 | 99.97 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)
*Significant at the .05 level

Another negative statement was reported in Table 87, but responses to the statement were compared to those of a positive nature. It was necessary to reverse the numerical values assigned to the response categories, which had the effect of changing the statement from a negative to a positive connotation. The overall mean response to this statement was 3.34 which, according to the reversed scale for negative statements, would be a neutral response. Thus, the respondents were neutral concerning the statement they were not familiar with

vocational education opportunities that were being made available to students. The average response ranged from 3.79 for technical workers to 2.88 for those in semi-skilled occupations.

TABLE 87

SUMMARY OF RESPONSES TO THE STATEMENT, "I AM NOT FAMILIAR WITH VOCATIONAL EDUCATION OPPORTUNITIES THAT ARE BEING MADE AVAILABLE TO STUDENTS."

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 3.75 | 3.00 | 3.50 | 3.50 | 4.25 | 3.50 | 3.58 |
| Technical | 4.00 | 3.50 | 4.25 | 4.00 | 3.50 | 3.50 | 3.79 |
| Skilled | 3.50 | 2.75 | 3.75 | 3.25 | 3.00 | 3.00 | 3.21 |
| Semi-skilled | 3.25 | 2.75 | 3.25 | 3.50 | 2.25 | 2.25 | 2.88 |
| Unskilled | 3.50 | 3.50 | 3.00 | 3.00 | 3.25 | 3.25 | 3.25 |
| Grand $\bar{X}$ by Site | 3.60 | 3.10 | 3.55 | 3.45 | 3.25 | 3.10 | |

Results of testing data from the preceding table for significant difference are provided in Table 88. Neither the comparisons among occupational categories nor among the interview sites produced any significant differences of mean responses.

TABLE 88

ANALYSIS OF VARIANCE OF RESPONSES TO THE STATEMENT, "I AM NOT FAMILIAR WITH VOCATIONAL EDUCATION OPPORTUNITIES THAT ARE BEING MADE AVAILABLE TO STUDENTS."

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 10.38 | 2.60 | 2.41 |
| Interview Sites | 5 | 5.54 | 1.11 | 1.03 |
| Interaction of Categories and Sites | 20 | 12.92 | .65 | .60 |
| Within Groups | 90 | 96.75 | 1.08 | |
| Total | 119 | 125.59 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

In order to assess the respondents' overall opinion as to whether they were adequately informed about opportunities available in and provided by vocational education, Table 89 was developed. These data represent a summary of the mean responses by occupational categories and interview sites to the statements encompassed in Tables 81, 83, 85 and 87. The entire group of interviewees expressed a mean response of 3.35 or neutral. The technical occupational category mean response was at the 3.58 or agree level while the remainder of the occupational categories responded neutral. All interview sites responded neutral. A 3.43 mean response at Enid and Guthrie was the highest level while a 3.20 mean response by Stillwater and

Ponca City was the lowest.

TABLE 89

OVERALL SUMMARY OF RESPONSES RELATIVE TO STATEMENTS REGARDING INFORMATION DISSEMINATION ABOUT OPPORTUNITIES AVAILABLE (RESEARCH OBJECTIVE 7)

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guthrie | Watonga | Kingfisher | Stillwater | Ponca City | |
| Professional | 3.13 | 3.44 | 3.31 | 3.50 | 3.00 | 3.25 | 3.27 |
| Technical | 3.50 | 3.81 | 3.69 | 3.75 | 3.50 | 3.25 | 3.58 |
| Skilled | 3.75 | 3.13 | 3.50 | 3.19 | 3.00 | 3.00 | 3.25 |
| Semi-skilled | 3.25 | 3.25 | 3.44 | 3.44 | 3.13 | 3.19 | 3.28 |
| Unskilled | 3.50 | 3.50 | 3.06 | 3.19 | 3.38 | 3.31 | 3.32 |
| Grand $\bar{X}$ by Site | 3.43 | 3.43 | 3.40 | 3.41 | 3.20 | 3.20 | |

All responses collected relative to the perception regarding information dissemination about opportunities available in vocational education were subjected to analysis of variance to determine if significant differences existed among the mean responses. Results of these tests are offered in Table 90. Inspection of this table reveals that when comparisons were made among occupational categories and interview sites, significant differences did not exist.

TABLE 90

SUMMARY ANALYSIS OF VARIANCE OF RESPONSES RELATIVE TO STATEMENTS REGARDING INFORMATION DISSEMINATION ABOUT OPPORTUNITIES AVAILABLE

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 28.42 | 7.10 | 2.42 |
| Interview Sites | 5 | 19.98 | 4.00 | 1.36 |
| Interaction of Categories and Sites | 20 | 49.48 | 2.47 | .84 |
| Within Groups | 90 | 264.25 | 2.94 | |
| Total | 119 | 362.13 | | |

P .05 2.46 (with 4 and 90 degrees of freedom)

In order to assess the respondents overall opinion toward vocational education, Table 91 was developed. These data represent a summary of the mean responses by occupational categories and interview sites. The entire group of interviewees expressed a mean response of 3.65 or agree and the mean response of each occupational category was of the same type, ranging from a low of 3.60 for the unskilled category to a high of 3.72 for the professionals. All interview sites responded agree while a 3.77 mean response at Guthrie was the highest and 3.52 at Ponca City the lowest. Enid, unskilled; Guthrie, semi-skilled; Watonga, professionals and unskilled; and Ponca City technical categories responded neutral regarding their

opinion toward vocational education.

TABLE 91

GRAND TOTAL SUMMARY OF RESPONSES TO ALL STATEMENTS

| Occupational Category | $\bar{X}$ Response by Interview Site | | | | | | Grand $\bar{X}$ by Category |
|---|---|---|---|---|---|---|---|
| | Enid | Guth-rie | Wa-tonga | King-fisher | Still-water | Ponca City | |
| Professional | 3.98 | 3.78 | 3.36 | 3.97 | 3.55 | 3.69 | 3.72 |
| Technical | 3.57 | 3.78 | 3.70 | 3.80 | 3.84 | 3.30 | 3.66 |
| Skilled | 3.57 | 3.87 | 3.70 | 3.60 | 3.70 | 3.53 | 3.66 |
| Semi-skilled | 3.68 | 3.45 | 3.71 | 3.64 | 3.66 | 3.57 | 3.62 |
| Unskilled | 3.42 | 4.00 | 3.47 | 3.50 | 3.68 | 3.53 | 3.60 |
| Grand $\bar{X}$ by Site | 3.64 | 3.77 | 3.59 | 3.70 | 3.68 | 3.52 | |

All responses collected from the 120 respondents in the study, regarding their overall attitude toward vocational education, were subjected to the analysis of variance to determine if significant differences existed among the mean responses. Results of these tests are offered in Table 92. Inspection of this table reveals that when comparisons were made among interview sites, significant differences did exist. The resulting F value was 2.93 which was significant at the .05 level of confidence. Comparisons across

other possible sources of variation revealed there were significant mean differences among mean responses by occupational categories and interview sites due to the interaction effect. This interaction is represented by a lack of uniformity among response categories and was interpreted to mean there were differences among the mean responses due to the effects of these independent variables. The interaction F value for these data was found to be 2.58 which was highly significant at the .05 level of probability.

TABLE 92

GRAND TOTAL SUMMARY OF RESPONSES TO ALL STATEMENTS

| Source of Variation | Degrees of Freedom | Sum of Squares | Mean Squares | F |
|---|---|---|---|---|
| Occupational Categories | 4 | 304.47 | 76.12 | 1.05 |
| Interview Sites | 5 | 1131.97 | 226.39 | 3.13* |
| Interaction of Categories and Sites | 20 | 3734.88 | 186.74 | 2.58** |
| Within Groups | 90 | 6510.50 | 72.34 | |
| Total | 119 | 11681.82 | | |

P .05 2.30 (with 5 and 90 degrees of freedom)
*Significant at the .05 level
**P .05 1.68 (with 20 and 90 degrees of freedom)

In order to determine the attitude of the study population toward the way in which the image of vocational education could be improved, each respondent was asked to rank order a list of statements. The Kendall Coefficient of Concordance: W, was applied to the data to determine the overall agreement among the respondents' rankings of the statements concerning vocational image. The following formula, obtained from Downie and Heath (21), was used to compute Kendall's W:

$$W = \frac{12 \sum D^2}{M^2(N)(N^2-1)}$$

Where: $D^2$ = difference of the sum of ranks from the mean squared

$M$ = number of respondents

$N$ = number of entities (statements) ranked

According to Siegel (22):

> Kendall suggests that the best estimate of the "true" rankings of the N objects is provided when W is significant, by the order of the various sums of ranks, Rj. If one accepts the criterion which the various judges have agreed upon (as evidenced by the magnitude and significance of W) in ranking the N entities, then the best estimate of the "true" rankings of those entities according to that criterion is provided by the order of the sums of ranks. This "best estimate" is associated, in a sense, with least squares.

The respondents' rankings of actions to improve the image of vocational education are reported in Table 93. To facilitate presentation of these data the statements were coded as follows:

1. Provide a wider variety of vocational education programs at all educational levels.
2. Recruit more students with higher academic ability into vocational education programs.

3. Do a better job of acquainting students with the world of work and of preparing them for related jobs.
4. Improve the working relationships between vocational education programs and local industries.
5. Provide more information about the opppртunities available in vocational education.
6. Bring programs of vocational education into closer alignment with the program of the total school system in each community.

Only the sum of ranks, the true ranking of the statements and the computed values of W are reported.

TABLE 93

RANKINGS OF ACTIONS NEEDED TO IMPROVE THE IMAGE OF VOCATIONAL EDUCATION BY INTERVIEW SITES

| Statement | Enid | | Guthrie | | Watonga | | Kingfisher | | Stillwater | | Ponca City | | Overall | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sum of Ranks | True Ranking | Sum of Ranks | True Ranking | Sum of Ranks | True Ranking | Sum of Ranks | True Ranking | Sum of Ranks | True Ranking | Sum of Ranks | True Ranking | Sum Rank | True Rank |
| 1 | 72 | 4 | 68 | 4 | 62 | 2 | 62 | 3 | 54 | 1 | 74 | 4 | 392 | 3 |
| 2 | 93 | 6 | 94 | 6 | 95 | 6 | 100 | 6 | 107 | 6 | 98 | 6 | 587 | 6 |
| 3 | 50 | 1 | 58 | 1 | 46 | 1 | 50 | 1 | 59 | 3 | 48 | 1 | 311 | 1 |
| 4 | 64 | 3 | 71 | 5 | 78 | 5 | 73 | 4 | 81 | 5 | 75 | 5 | 442 | 5 |
| 5 | 63 | 2 | 62 | 2 | 65 | 3 | 61 | 2 | 61 | 4 | 66 | 3 | 378 | 2 |
| 6 | 78 | 5 | 67 | 3 | 74 | 4 | 74 | 5 | 58 | 2 | 59 | 2 | 410 | 4 |
| | W=.15* | | W=.11* | | W=.19* | | W=.21* | | W=.29* | | W=.20* | | W=.17* | |

* = W significant at .05 level

It should be noted that all of the W values reported in Table 93 were found to be significant at the .05 level. Therefore, because of this, it was possible to establish a "true" ranking of the items for the entire group of respondents on the basis of the least sums of squares. This true ranking of the items would be as follows:

1. Do a better job of acquainting students with the world of work and of preparing them for related jobs.
2. Provide more information about the opportunities available in vocational education.
3. Provide a wider variety of vocational education programs at all educational levels.
4. Bring programs of vocational education into closer alignment with the program of the total school system in each community.
5. Improve the working relationships between vocational education programs and local industry.
6. Recruit more students with higher academic ability into vocational education programs.

Table 94 reveals the results of comparing the rankings of those composing the occupational categories. It is noteworthy that this comparison was the same as by interview site.

TABLE 94

RANKINGS OF ACTIONS NEEDED TO IMPROVE THE IMAGE OF VOCATIONAL EDUCATION BY OCCUPATIONAL CATEGORIES

| Statement | Professional | | Technical | | Skilled | | Semi-skilled | | Unskilled | | Overall | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sum of Ranks | True Ranking | Sum of Ranks | True Ranking | Sum of Ranks | True Ranking | Sum of Ranks | True Ranking | Sum of Ranks | True Ranking | Sum Rank | True Rank |
| 1 | 75 | 4 | 66 | 2 | 83 | 4 | 86 | 4 | 82 | 4 | 392 | 3 |
| 2 | 121 | 6 | 115 | 6 | 116 | 6 | 113 | 6 | 122 | 6 | 587 | 6 |
| 3 | 72 | 2 | 51 | 1 | 60 | 1 | 68 | 2 | 60 | 1 | 311 | 1 |
| 4 | 98 | 5 | 84 | 3 | 82 | 3 | 93 | 5 | 85 | 5 | 442 | 5 |
| 5 | 65 | 1 | 95 | 5 | 78 | 2 | 66 | 1 | 74 | 2 | 378 | 2 |
| 6 | 73 | 3 | 93 | 4 | 85 | 5 | 78 | 3 | 81 | 3 | 410 | 4 |
| | W=.23* | | W=.26* | | W=.16* | | W=.15* | | W=.21* | | W=.17* | |

* = W significent at .05 level

# CHAPTER V

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this chapter is to present a summary review of the study problem and its setting, the design and conduct of the study and the major findings. Also, presented are conclusions and recommendations which were based upon analysis and summarization of data collected and upon observations and impressions resulting from the design and conduct of the study.

### Summary of the Study

#### Purpose of the Study

The primary purpose of this study was to determine the image of vocational education in selected Oklahoma cities as perceived by members of a public categorized by levels of employment, and to compare the image of vocational education perceived by persons comprising the respective categories in the selected cities.

#### Specific Objectives of the Study

The following specific objectives were formulated to accomplish the major purpose of the study:

1. To determine if the public perceives that more vocational programs should be offered at all educational levels.

2. To determine if the public perceives that the quality of secondary vocational programs is adequate.
3. To determine if the public perceives that vocational programs can benefit students of all ability levels.
4. To determine the public perception of the way in which vocational education programs work with and are aligned with the needs of local industry.
5. To determine how the public perceives vocational education in comparison to the rest of the educational system.
6. To determine if the public perceives that vocational education programs are adequately accomplishing their major purpose which is to provide education for gainful employment for all who desire it, need it, and show the initiative to obtain it.
7. To determine if the public perceives that it is adequately informed about opportunities available in and provided by vocational education.

## Rationale for the Study

Vocational education in Oklahoma, as well as nationally, is experiencing a period of transition. As noted previously, major changes in the scope, nature, direction, and goals of vocational education have taken place in the last five years. These changes are certain to continue at an accelerated rate in the period just ahead. Yet, the current image of vocational education is based largely on observations of programs which have grown out of former policies and practices.

It seems reasonable to assume that better planning of vocational education programs could be accomplished in Oklahoma if the current vocational image held by the public were known. Therefore, it seemed necessary that this study be conducted in an attempt to assess certain aspects of vocational image as perceived by selected segments of a public.

## Design and Conduct of the Study

Following a review of research and literature related to the problem, the major tasks involved in the design and conduct of the study were (1) selecting the study population, (2) developing an instrument for data collection, (3) collecting data, and (4) analyzing the findings.

The study population consisted of 120 individuals, categorized by occupational levels, in Northern Central Oklahoma. The locations selected for data collection in this area were Enid, Guthrie, Watonga, Kingfisher, Stillwater, and Ponca City. These cities were selected as interview sites because of their proximity to Stillwater and because there were at least three of the following four vocational education programs in the secondary public school system of each city: trade and industrial education, business and office education, vocational agriculture education, and distributive education. For the purposes of this study, the "public" in each location consisted of twenty individuals--four representatives of each of the following occupational categories: professional, technical, skilled, semi-skilled, and unskilled.

## Findings of the Study

This study was concerned with determining the image of vocational education in Oklahoma, as perceived by a public categorized by occupational levels. Seven specific research objectives were developed to guide the conduct of the study. The research findings of the study in summary form are as follows:

1. One specific research objective of the study was concerned with the public's image as to the adequacy of vocational education offerings available to students. The overall mean response by occupational categories and interview sites to the group of statements developed to measure this objective was 3.38 or neutral indicating that as a group the respondents neither agreed nor disagreed regarding the adequacy of current offerings. A 3.48 mean response for all professionals was the highest level while a 3.22 for the technical workers was the lowest. The analysis of variance calculation on the data revealed that there were significant differences among the opinions of respondents when comparisons were made across interview sites.
2. Research Objective Number Two was designed to determine the public's perception toward the quality of vocational education programs. Responses to the six quality assessment statements were combined and the overall mean response of 3.98 was found to be at the agree level. Professional workers responded at the highest level (4.19) while the unskilled category response of 3.83 was the lowest. The

analysis of variance test on the data obtained from the occupational categories yielded an F value of 3.00, which indicated there were significant differences among the responses of the groups at the .05 level. No significant variation was found among interview sites or interaction of categories and sites.

3. The primary concern of Research Objective Number Three was to determine if the public interviewed perceived vocational education programs as being able to benefit students of all ability levels. The public agreed that such programs could benefit students of all ability levels. This was evidenced by an overall mean response of 3.82 or agree. A 3.90 mean response for the professional category was the highest while a 3.76 for the skilled workers was the lowest. Statistical analysis provided calculated F values below the predetermined level of probability. Therefore, no statistically significant difference was found which reveals the variation in opinion among groups was not significant.

4. The public perception toward Research Objective Number Four, regarding the alignment of vocational education programs with the needs of local industry, was found to be neutral with a 3.26 overall mean response. Technical workers responded at the highest level (3.30) while the semi-skilled category response of 3.21 was the lowest. F values were calculated and determined to be below the level required to be significant at the .05 level of

confidence.

5. Determining the public perception regarding vocational education in comparison to the rest of education was the purpose of Research Objective Number Five. This public had a favorable perception toward vocational education in comparison with the rest of the educational system as indicated by the mean response of 3.68 or agree. A 3.73 mean response for the professional and skilled categories was the highest while a 3.62 for the semi-skilled workers was the lowest. However, statisitical analysis provided calculated F values that were found to be below the required value for significant differences at the .05 level of probability.
6. This public unanimously agreed that vocational education programs are adequately accomplishing their major purpose which is to provide education for gainful employment for all who desire it, need it, and show the initiative to obtain it. This was evidenced by an overall mean response of 3.87. The lowest response was 3.72 for the unskilled workers to a high of 3.91 for the professional and skilled categories. The calculated F scores on comparisons of the several sources possible variation did not reach the values required to be significant at the .05 level.
7. Research Objective Number Seven, regarding information dissemination about opportunities available in vocational education, received an overall mean response of 3.35 or neutral from this public. Technical workers responded at

the highest level (3.58) while the skilled category response of 3.26 was the lowest. Statistical analysis of the data revealed F scores lower than the required values necessary to indicate significant differences among respondent and interview site groups at the .05 level of significance.

Needed Improvement in Vocational Education

In order to determine the attitude of the study population toward the way in which the image of vocational education could be improved, each respondent was asked to rank order a list of statements. The following represents their "true" ranking of the statements as determined by treatment of the responses with Kendall's Coefficient of Concordance W:

1. Do a better job of acquainting students with the world of work and of preparing them for related jobs.
2. Provide more information about the opportunities available in vocational education.
3. Provide a wider variety of vocational education programs at all educational levels.
4. Bring programs of vocational education into closer alignment with the program of the total school system in each community.
5. Improve the working relationships between vocational education programs and local industries.
6. Recruit more students with higher academic ability into vocational education programs.

## Conclusions

Inspection and interpretation of the study findings prompted the formulation of certain conclusions by the investigator as detailed below.

### Conclusion 1

The public was not knowledgeable enough concerning the adequacy of vocational education offerings available to students to offer an opinion either positive or negative as indicated by their neutral response to the group of statements relating to this point.

### Conclusion 2

The respondents of the study were in agreement that the quality of vocational education programs, in Oklahoma, was good. This was evidenced by an agree response to the statements designed to measure their perception concerning this point.

### Conclusion 3

The interviewed public perceived vocational education as being able to serve students of all ability levels. This was evidenced by a mean response of "agree" from both the occupational categories and interview sites.

### Conclusion 4

The respondents of the study were not knowledgeable concerning the manner in which vocational education programs work with and are aligned with the needs of local industry as indicated by their

neutral response to the statements relating to this point.

Conclusion 5

The interviewed public responded favorable toward vocational education in comparison with the rest of the educational system as was evidenced by their agree response to the statements designed to measure their perception concerning this point.

Conclusion 6

The interviewed public agreed that vocational education programs are accomplishing their major purpose by providing education for gainful employment for all who desire it, need it, and show the initiative to obtain it. This was evidenced by a mean response of "agree" from both the occupational categories and interview sites.

Conclusion 7

The interviewed public was not adequately informed about the opportunities available in and provided for by vocational education programs as indicated by an overall neutral response to the statements designed to measure their perception concerning this point.

Conclusion 8

The respondents interviewed in the study did not perceive that vocational education was adequately acquainting students with the world of work, nor was it providing adequate information concerning the opportunities available.

Conclusion 9

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.

## Recommendations

On the Basis of data obtained for the study, certain general recommendations and recommendations for additional research were developed.

### General Recommendations

1. Vocational education personnel should make a concerted effort to more adequately inform the general public concerning the opportunities available in vocational education. It seems reasonable that a large portion of this information dissemination process should be conducted by competent guidance counselors, teachers, and school administrators.
2. Vocational education personnel at all levels should make an effort to uncover and publicize the current and anticipated employment opportunities and relay this information to students.
3. Vocational educators should strive to help the general public realize the value, dignity, and personal fulfillment associated with the careers in the world of work.

## Additional Research

It is recommended that a study of the same basic design as this research endeavor be conducted on a state-wide basis in order to help vocational educators determine the image of vocational education in all sections of the state.

As perceived by the investigator, it would be of value to conduct research, of the same type as this study, to determine the attitude of school administrators, school board members, parents and students toward vocational education programs.

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# APPENDIX A

# STEERING COMMITTEE MEMBERS

The steering committee, which assisted in classifying occupations and in certain other tasks involved in the study, was comprised of the following in idividuals:

Dr. Robert R. Price, Head, Agricultural Education Department, Oklahoma State University; and

Dr. H. Robert Terry, Agricultural Education Department, Oklahoma State University.

Dr. Francis Tuttle, Director, Oklahoma State Department of Vocational and Technical Education; and

Mr. Byrle Killian, Assistant Director, Oklahoma State Department of Vocational and Technical Education; and

Mr. Arch B. Alexander, Assistant Director, Oklahoma State Department of Vocational and Technical Education; and

Dr. William W. Stevenson, Assistant State Director, Oklahoma State Department of Vocational and Technical Education and Head, Division of Research, Planning, and Evaluation; and

Mr. Dale A. Hughey, State Coordinator, Area Vocational-Technical Schools, Oklahoma State Department of Vocational and Technical Education; and

Mr. Roy E. Ayres, State Supervisor, Vocational Trade and Industrial Education, Oklahoma State Department of Vocational and Technical Education; and

Mr. Victor Van Hook, State Supervisor, Vocational Business and Office Education, Oklahoma State Department of Vocational and Technical Education; and

Mr. John Talbott, State Supervisor, Technical Education, Oklahoma State Department of Vocational and Technical Education; and

Mr. M. J. DeBenning, State Supervisor, Vocational Distributive Education, Oklahoma State Department of Vocational and Technical Education; and

Dr. Irene Clements, Curriculum Specialist, Oklahoma State Department of Vocational and Technical Education.

# APPENDIX B

NAME _____

Please respdnd to each of the following occupations by circling the response that most nearly categorizes the occupation.

P = Professional

T = Technical

S = Skilled

SS - Semi-skilled

U = Unskilled

| | | | | | | |
|---|---|---|---|---|---|---|
| 1. | Lawyer | P | T | S | SS | U |
| 2. | School Administrator | P | T | S | SS | U |
| 3. | Non-vocational Teacher | P | T | S | SS | U |
| 4. | Vocational Teacher | P | T | S | SS | U |
| 5. | Insurance Agent | P | T | S | SS | U |
| 6. | Chamber of Commerce Manager | P | T | S | SS | U |
| 7. | Farm Owner | P | T | S | SS | U |
| 8. | Banker | P | T | S | SS | U |
| 9. | Barber | P | T | S | SS | U |
| 10. | Beautician | P | T | S | SS | U |
| 11. | Nurse | P | T | S | SS | U |
| 12. | Law Officer | P | T | S | SS | U |
| 13. | Carpenter | P | T | S | SS | U |
| 14. | Government Office Clerk | P | T | S | SS | U |
| 15. | Welder | P | T | S | SS | U |
| 16. | Mechanic | P | T | S | SS | U |
| 17. | Waitress | P | T | S | SS | U |
| 18. | Feed Store Employee | P | T | S | SS | U |
| 19. | Gasoline Service Station Attendant | P | T | S | SS | U |
| 20. | Grocery Store Stocker | P | T | S | SS | U |

| | | | | | | |
|---|---|---|---|---|---|---|
| 21. | Minister | P | T | S | SS | U |
| 22. | Farm Laborer | P | T | S | SS | U |
| 23. | Hospital Administrator | P | T | S | SS | U |
| 24. | Pharmacist | P | T | S | SS | U |
| 25. | Veterinarian | P | T | S | SS | U |
| 26. | Newspaper Reporter | P | T | S | SS | U |
| 27. | Automobile Salesman | P | T | S | SS | U |
| 28. | Motel Manager | P | T | S | SS | U |
| 29. | Radio and Television Repairman | P | T | S | SS | U |
| 30. | Bookkeeper | P | T | S | SS | U |
| 31. | Real Estate Agent | P | T | S | SS | U |
| 32. | House Painter | P | T | S | SS | U |
| 33. | Automobile Body Repairman | P | T | S | SS | U |
| 34. | School Counselor | P | T | S | SS | U |
| 35. | Elementary School Teacher | P | T | S | SS | U |
| 36. | Librarian | P | T | S | SS | U |
| 37. | Housewife | P | T | S | SS | U |
| 38. | Construction Laborer | P | T | S | SS | U |
| 39. | Electrician | P | T | S | SS | U |
| 40. | Plumber | P | T | S | SS | U |
| 41. | Farm Equipment Mechanic | P | T | S | SS | U |
| 42. | Jeweler of Jewelry Repairman | P | T | S | SS | U |
| 43. | Shoe Repairman | P | T | S | SS | U |
| 44. | Bank Teller | P | T | S | SS | U |
| 45. | Railroad Telegrapher | P | T | S | SS | U |
| 46. | Clothing Store Manager or Owner | P | T | S | SS | U |
| 47. | Fireman | P | T | S | SS | U |

| | | | | | | |
|---|---|---|---|---|---|---|
| 48. | Postal Employee | P | T | S | SS | U |
| 49. | Liquor Store Operator | P | T | S | SS | U |
| 50. | Implement Dealer | P | T | S | SS | U |
| 51. | Building Custodian | P | T | S | SS | U |
| 52. | City Sanitation Worker | P | T | S | SS | U |
| 53. | Motel Maid | P | T | S | SS | U |
| 54. | City Water Department Worker | P | T | S | SS | U |

# APPENDIX C

STUDY POPULATION BY OCCUPATIONAL CATEGORY AT ENID

| | Professional | Technical | Skilled | Semi-skilled | Unskilled |
|---|---|---|---|---|---|
| Enid | School Counselor* | Insurance Agent* | Welder* | Waitress* | Motel Maid |
| | Elementary School Teacher* | Chamber of Commerce Manager* | Carpenter | Housepainter | Grocery Store Stocker* |
| | Minister | Clothing Store Mgr. or Owner* | Automobile Salesman* | Liquor Store Operator* | Construction Laborer* |
| | Non-vocational Teacher* | Hospital Administrator | Mechanic* | Housewife* | Farm Laborer |
| | Lawyer | Farm Owner | Implement Dealer* | Feed Store Employee | City Water Dept. Worker* |
| | School Administrator* | Banker* | Railroad Telegrapher | Gasoline Service Station Attendant* | Building Custodian* |

*Indicates occupation interviewed

STUDY POPULATION BY OCCUPATIONAL CATEGORY AT GUTHRIE

| | Professional | Technical | Skilled | Semi-skilled | Unskilled |
|---|---|---|---|---|---|
| Guthrie | School Administrator* | Radio and Television Repairman | Automobile Salesman* | Liquor Store Operator | Construction Laborer* |
| | Non-vocational Teacher* | Clothing Store Mgr. or Owner* | Farm Equipment Mechanic | Feed Store Employee* | Farm Laborer |
| | Vocational Teacher* | Farm Owner | Bookkeeper* | House Painter | Building Custodian* |
| | Veterinarian | Real Estate Agent* | Carpenter | Waitress* | Grocery Store Stocker* |
| | Minister | Insurance Agent* | Barber* | Postal Employee* | Motel Maid |
| | Pharmacist* | Newspaper Reporter* | Mechanic* | Gasoline Service Station Attendant* | City Sanitation Worker* |

*Indicates occupation interviewed

STUDY POPULATION BY OCCUPATIONAL CATEGORY AT WATONGA

| | Professional | Technical | Skilled | Semi-skilled | Unskilled |
|---|---|---|---|---|---|
| Watonga | School Counselor* | Banker* | Welder* | House Painter | Construction Laborer |
| | Elementary School Teacher* | Nurse | Implement Dealer* | Gasoline Service Station Attendant* | Farm Laborer |
| | Veterinarian | Newspaper Reporter* | Carpenter | Feed Store Employee* | City Water Dept. Worker* |
| | Librarian* | Chamber of Commerce Manager* | Bank Teller* | Housewife | Building Custodian* |
| | Vocational Teacher* | Insurance Agent* | Fireman* | Waitress* | Motel Maid* |
| | Minister | Radio and Television Repairman | Plumber | Liquor Store Operator* | Grocery Store Stocker* |

*Indicates occupation interviewed

STUDY POPULATION BY OCCUPATIONAL
CATEGORY AT KINGFISHER

| | Professional | Technical | Skilled | Semi-skilled | Unskilled |
|---|---|---|---|---|---|
| Kingfisher | Elementary School Teacher* | Insurance Agent* | Bookkeeper* | Feed Store Employee | City Sanitation Worker* |
| | Non-vocational Teacher* | Radio and Television Repairman | Carpenter* | Waitress* | Farm Laborer |
| | Veterinarian | Chamber of Commerce Manager | Plumber | Gasoline Service Station Attendant* | Building Custodian* |
| | Vocational Teacher* | Banker* | Fireman | Liquor Store Operator* | Construction Laborer* |
| | Pharmacist* | Real Estate Agent* | Jeweler or Jewelry Repairman* | Housewife | Grocery Store Stocker* |
| | Minister | Clothing Store Mgr. or Owner* | Mechanic* | Postal Employee* | Motel Maid |

*Indicates occupation interviewed

STUDY POPULATION BY OCCUPATIONAL
CATEGORY AT STILLWATER

| | Professional | Technical | Skilled | Semi-skilled | Unskilled |
|---|---|---|---|---|---|
| Stillwater | Lawyer | Real Estate Agent* | Implement Dealer* | Liquor Store Operator* | Building Custodian |
| | School Counselor* | Farm Owner* | Fireman* | Gasoline Service Station Attendant* | Farm Laborer* |
| | Non-vocational Teacher* | Clothing Store Mgr. or Owner* | Law Officer | Postal Employee | Motel Maid* |
| | School Administrator* | Nurse | Beautician* | Feed Store Employee* | Grocery Store Stocker* |
| | Minister* | Banker* | Barber* | Waitress* | Construction Laborer* |
| | Elementary School Teacher | Radio and Television Repairman | Automobile Salesman | Housewife | City Water Dept. Worker |

*Indicates occupation interviewed

STUDY POPULATION BY OCCUPATIONAL CATEGORY AT PONCA CITY

| | Professional | Technical | Skilled | Semi-skilled | Unskilled |
|---|---|---|---|---|---|
| Ponca City | School Counselor* | Real Estate Agent* | Shoe Repairman | Postal Employee | Building Custodian* |
| | Non-vocational Teacher | Newspaper Reporter | Motel Manager* | Waitress* | City Sanitation Worker* |
| | School Administrator* | Hospital Administrator* | Barber* | House Painter | Farm Laborer |
| | Minister* | Farm Owner* | Bank Teller* | Liquor Store Operator* | Motel Maid* |
| | Elementary School Teacher* | Banker* | Fireman | Feed Store Operator* | Construction Laborer |
| | Veterinarian | Radio and Television Repairman | Implement Dealer* | Gasoline Service Station Attendant* | Grocery Store Stocker* |

*Indicates occupation interviewed

# APPENDIX D

CITY_____ OCCUPATION_____

We are attempting to determine how the general public feels about vocational education in selected communities. As a school patron and taxpayer, you are an important member of the public and the extent to which you agree with the following statements will benefit us a great deal in measuring public opinion.

Please indicate how you feel about each of the statements by using the following scale:

SA = Strongly Agree

A = Agree

N = Neutral

D = Disagree

SD = Strongly Disagree

| | | | | | |
|---|---|---|---|---|---|
| 1. Vocational education is a beneficial educational program for those who will enter the labor market upon graduation from high school. | SA | A | N | D | SD |
| 2. Present vocational education programs contribute a great deal to the ability of a high school graduate to find and hold a job. | SA | A | N | D | SD |
| 3. Vocational education in the high school is highly overrated. | SA | A | N | D | SD |
| 4. Youth groups (FFA, FHA, VICA, DECA, and FBLA) are important parts of vocational education, especially for developing good citizenship. | SA | A | N | D | SD |
| 5. Good vocational education programs aid in attracting new industries to an area. | SA | A | N | D | SD |
| 6. A graduate of a high school vocational education program is generally suited only for unskilled work. | SA | A | N | D | SD |
| 7. Vocational education is offering a sufficient variety of choices to students. | SA | A | N | D | SD |
| 8. There are currently enough students in vocational education at the high school level. | SA | A | N | D | SD |

| | | | | | | |
|---|---|---|---|---|---|---|
| 9. | Vocational education is a major answer to the problems of unemployment. | SA | A | N | D | SD |
| 10. | Vocational education would be strengthened through exposing all students at all grade levels to occupational information. | SA | A | N | D | SD |
| 11. | Vocational personnel are doing an adequate job of informing parents of the importance and value of vocational education. | SA | A | N | D | SD |
| 12. | Most vocational education courses lead nowhere. | SA | A | N | D | SD |
| 13. | Vocational education receives more support and funds than it deserves. | SA | A | N | D | SD |
| 14. | A wider variety of vocational programs should be offered for those students not going to college. | SA | A | N | D | SD |
| 15. | Vocational educators are looking for the academically talented student rather than providing for students with low levels of academic aptitude. | SA | A | N | D | SD |
| 16. | It is not important to train students in vocational education in high school if they plan to attend college. | SA | A | N | D | SD |
| 17. | Vocational education courses are among the most valuable courses a high school student can take in preparing for further education. | SA | A | N | D | SD |
| 18. | Vocational education courses contribute a great deal to the ability of a high school graduate to find and hold a job. | SA | A | N | D | SD |
| 19. | There is a need for college level vocational education programs. | SA | A | N | D | SD |
| 20. | Vocational education courses take up so much of a student's time that could be better spent in extracurricular activities (sports, band, etc.). | SA | A | N | D | SD |
| 21. | Current offerings of vocational education in high schools should be expanded. | SA | A | N | D | SD |
| 22. | Bright students should be encouraged to enter vocational education programs. | SA | A | N | D | SD |

| | | | | | | |
|---|---|---|---|---|---|---|
| 23. | Business and industry are often not informed sufficiently about vocational and technical education offerings available to train or retrain workers. | SA | A | N | D | SD |
| 24. | Vocational education courses are designed primarily for the student with limited abilities. | SA | A | N | D | SD |
| 25. | Vocational education programs are often not kept up-to-date with the needs of business and industry. | SA | A | N | D | SD |
| 26. | Area vocational-technical schools whould enable students to have more opportunities for training to meet industrial needs. | SA | A | N | D | SD |
| 27. | Vocational education has proved itself to be an indispensable part of the curriculum in high schools. | SA | A | N | D | SD |
| 28. | High school students generally do not know about opportunities available in vocational education. | SA | A | N | D | SD |
| 29. | It is more important to provide students with a sound basic education than to use the time for vocational education. | SA | A | N | D | SD |
| 30. | Vocational education programs should be made available to students before they are in high school. | SA | A | N | D | SD |
| 31. | Vocational education programs can be of benefit to each student regardless of his ability level. | SA | A | N | D | SD |
| 32. | Most students who take vocational education courses are slow learners and come from low income families. | SA | A | N | D | SD |
| 33. | Vocational education programs can be designed to benefit all high school students. | SA | A | N | D | SD |
| 34. | Secondary vocational education programs do not prepare students for employment. | SA | A | N | D | SD |
| 35. | I am not familiar with vocational education opportunities that are being made available to students. | SA | A | N | D | SD |

36. Academically talented students, even though interested in the area, should be discouraged from enrolling in vocational education programs. SA A N D SD

37. Students interested in a vocational education course should attend an area vocational-technical or trade school rather than a regular high school. SA A N D SD

38. Students should not be allowed in vocational education courses until they reach the junior or senior level in high school. SA A N D SD

39. From your personal point of view, what would be the order of importance of the following factors for improving the future image of vocational education? (Rank order the factors by placing "1" before the one you consider most important, "2" before the second most important, etc.)

_____Provide a wider variety of vocational education programs at all educational levels.

_____Recruit more students with higher academic ability into vocational education programs.

_____Do a better job of acquainting students with the world of work and of preparing them for related jobs.

_____Improve the working relationships between vocational education programs and local industries.

_____Provide more information about the opportunities available in vocational education.

_____Bring programs of vocational education into closer alignment with the program of the total school system in each community.

_____Other (please specify)_____

VITA

Fred Alfred Shultz

Candidate for the Degree of

Doctor of Education

Thesis: SELECTED ASPECTS OF VOCATIONAL IMAGE AS PERCEIVED BY A PUBLIC CATEGORIZED BY OCCUPATIONAL LEVELS

Major field: Agricultural Education

Biographical:

Personal Data: Born in Boise City, Oklahoma, October 9, 1940, the son of Edgar A. and Mabel Shultz

Education: Graduated from Boise City High School, Boise City, Oklahoma, in May, 1958; attended Panhandle State College from September, 1959, to May, 1962; received the Bachelor of Science Degree from Oklahoma State University, Stillwater, Oklahoma, in May, 1963, with a major in Agricultural Education; engaged in post-graduate study toward Degree of Master of Science at Oklahoma State University, Stillwater, Oklahoma, from June, 1963 to May, 1969; completed requirements for the Doctor of Education degree at Oklahoma State University in July, 1971.

Professional Experience: Teacher of Vocational Agriculture at Laverne High School, Laverne, Oklahoma, from July, 1963 to June, 1969. Administrative Intern, Oklahoma State Department of Vocational and Technical Education, Stillwater, Oklahoma, from September 1969, to present.

Professional Organizations: Member of the Oklahoma Vocational Agriculture Teachers' Association, National Vocational Agriculture Teachers' Association, American Vocational Association, Oklahoma Education Association, former member Harper County Oklahoma Education Association, member of Alpha Gamma Rho Fraternity.

Leadership Activities: Vice President and Secretary of the Block and Bridle Club, Panhandle State College, Goodwell, Oklahoma; cadet officer, ROTC, Panhandle State College, Goodwell, Oklahoma; Secretary, Laverne Adult Farmer

Organization; President, Laverne Stock Show Board; President, Woodward Professional Improvement Group; Vice President, Laverne Methodist Church Board, Associate Lay Leader, Laverne Methodist Church; member of the Administrative Board and Family Life Coordinator, Highland Park Methodist Church, Stillwater, Oklahoma.