

A COMPARATIVE STUDY OF VOCATIONAL
INTERESTS OF BOYS AND GIRLS ENROLLED IN
VOCATIONAL AGRICULTURE AT ARKANSAS CITY
AND CENTRAL OF BURDEN HIGH SCHOOLS IN 1973-74

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KENNETH W. BOWIE

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James Albracht
Major Professor

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Chapter I

I INTRODUCTION

Vocational agriculture, when implemented in 1917, as a result of the Smith-Hughes Act, was primarily designed to train young men in the skills related to agriculture which were needed to farm. Historically, vocational agriculture curricula included only those skills that a young man needed when he returned to the farm upon graduation from high school.

With the introduction of more sophisticated agricultural equipment, the vocational agriculture curricula were changed to include instruction in the many areas of agriculture mechanics.

In recent years vocational agriculture curriculums have undergone many other metamorphoses. Today, many high school agriculture curricula include instruction in phases of agribusiness including: sales and services, credit and financing, salesmanship, farm law, human relations, distribution, marketing and a host of others. Ornamental horticulture has been introduced as a part of the high school vocational agriculture curriculum in many schools, and agricultural career education is also receiving a great deal of attention. The opportunities for youth in agriculture related occupations is expanding.

The question concerning agriculture educators today is whether the vocational agriculture curriculum is keeping pace with rapidly changing student interests. According to Brenner¹ nearly one half of the students

¹Edward F. Brenner, "A Study of Curricular Interest As Expressed by Forty-two Boys Enrolled in the Vocational Agriculture Program in the Ness City High School in 1969-70" (A Master's Report, Kansas State University, 1970) p. 19.

drop out of the vocational agriculture program between the ninth and twelfth grades. Brenner attributed this drop out rate to the fact that the curriculum did not complement the students' interests.

Recent studies seem to indicate that the most progressive vocational agriculture departments are providing the type of curriculum which is meeting the needs and expressed interests of the students enrolled in the program. Farrell² stated that the curriculum was rated as excellent by most of the students who had completed the program, but that most of those students questioned were boys.

With the increasing interest of girls in the vocational agriculture curriculum, continued evaluation must be done.

II THE PROBLEM

This problem was a comparison of the variation in vocational interest between boys and girls enrolled in Vocational Agriculture at Arkansas City and Central High Schools, Kansas.

Statement of the Problem. The purposes of this study were: 1) to determine if there were enough difference of vocational objectives and interests between boys and girls enrolled in Vocational Agriculture in Arkansas City and Central High of Burden to justify any curriculum changes for these schools. 2) To reflect the vocational interest between sexes involved in the study in order that each school might be able to make adjustments unique to it's own situation.

²Maurice Joseph Farrell, "An Evaluation of Fourteen Areas of the Vocational Agriculture Program at Hill City High School, 1959-1972". (A Master's Report, Kansas State University, 1973).

III OBJECTIVES

The objectives of this study are: 1) to determine the differences of vocational interests between boys and girls enrolled in Vocational Agriculture at Arkansas City and Central of Burden High Schools. 2) To discover how the vocational agriculture curriculum might be changed to better meet the interest of all the students enrolled.

IV LIMITATIONS OF THE STUDY

The study was limited to two schools: Arkansas City and Central of Burden.

Fifty-one boys and 23 girls participated in the vocational interest survey at Arkansas City while 52 boys and 26 girls were involved in the same survey at Central of Burden.

Arkansas City is a city of approximately 13,000 located in the southwest corner of Cowley County Kansas at the junction of Highways US 77 and US 166. Arkansas City Senior High School (10-12) has an enrollment of approximately 400 students and currently has a two-teacher Vocational Agriculture Department.

Central High of Burden is located at Burden, Kansas on Highway US 160. Central is a unified school district serving the communities in Northeast Cowley County--Atlanta, Burden, and Cambridge and has students from outside the district coming from Grenola, Latham, and Winfield. Some of the students inside the district have mailing addresses at Rock. Central High has a single teacher Agriculture Department which is to be expanded to a two-teacher department beginning with the 1974-75 school year. Total enrollment at the Senior High (grades 9-12) was 145 students.

Burden has a population of 580, while Atlanta has 375 citizens and Cambridge has 230 residents. Agriculture is the main enterprise in all three communities.

Both Arkansas City and Central of Burden have an enrollment of nearly 40% with non-farm background in the Vocational Agriculture programs. Both schools are located in the South Central FFA district and the students in all the FFA chapters in Cowley County are quite active in 4-H.

The vocational agriculture department at Central of Burden has been in operation for only two and one half years whereas the Arkansas City department is among one of the oldest departments in the state. From time to time student responses may tend to vary between Arkansas City and Central reflecting a difference in background and an understanding consideration for the subject matter being considered.

Arkansas City has also been the center for several livestock shows and has been influenced quite favorably by the Agribusiness department at Cowley County Community Junior College. These factors may have also been instrumental in determining degree of student interest for the vocational areas considered in this study.

V DEFINITIONS OF TERMS USED

The following terms were set aside for special definition as they applied to the study and had definitions for this study that could have varied somewhat from those in ordinary usage:

Vocational Agriculture. A program for the training of present and prospective farmers and agribusinessmen in the areas defined by the Smith-Hughes Act of 1917 and the National Vocational Education Act of 1963.

Vocational Interest. Stated preference by the students for their interest in a particular agriculture related subject.

Average Vocational Interest in a Subject. A weighted average of the interest expressed by students was determined by a Likert scale with a value of one for "low", three for "medium", and five for "high" interest.

FFA. Future Farmers of America. The national organization for boys and girls studying vocational agriculture in public secondary schools under the provision of the National Education Act.

Animal Science. An area of instruction in vocational agriculture in which students develop skills in selection, breeding, feeding, fitting and showing, diseases and management.

Crops and Soils. An area of instruction in vocational agriculture dealing with crop varieties, identification, judging, fertilization, conservation, harvesting, storing, marketing, diseases and cultural practices.

Agricultural Mechanics. An area of instruction in Vocational Agriculture in which students develop skills in welding, small engine repair, tractor and machinery maintenance, farm electrification, soil surveying, carpentry and concrete, and metal construction. They also receive instruction on safety and proper use of tools.

Horticulture. Includes the following areas of discipline: plant identification, plant classification, landscaping, gardening, turf and nursery management, pruning and grafting, horticultural plants, diseases, and greenhouse management.

Agribusiness Management. This area includes instruction in managing areas dealing with cropping, livestock, and farmstead planning. Credit and financing, governmental agencies, agricultural law, and labor management. Trusts and wills are also studied in this area. Other managing

areas include salesmanship, human relations, record keeping, advertising, distribution, and marketing.

FFA Activities. Include leadership skills such as public speaking, parliamentary procedure, participation in leadership schools and camps, and committee work. Other FFA activities include participation in civic activities, applying for foundation awards, and developing a program of work.

VI METHOD OF RESEARCH

A vocational interest survey consisting of 65 questions related to various areas of instruction involved with vocational agriculture was developed with assistance of Dr. James Albracht, Prof. of Adult and Occupational Education at Kansas State University. Seventy-four students enrolled in vocational agriculture at Arkansas City and 78 students enrolled in Vocational Agriculture at Central of Burden High School were asked to complete the survey.

The survey consisted of 65 areas of vocational agriculture. To the right of each question each student was asked to indicate whether he or she had a "high", "medium", or "low" interest in each of the various 65 areas. All students were instructed not to answer according to felt competencies but only to expressed interest.

Each student was instructed to answer each question, as no answer would be interpreted by the tester to mean "low" interest. The students were also instructed to work rapidly and not try to anticipate norms but rather to give honest first-impression responses to their interest in the various areas being surveyed.

The surveys were administered at Arkansas City by the two vocational agriculture instructors under the direction of this writer. The surveys were administered at Central of Burden by this writer as he was the instructor there at the time of the study. No attempt was made to survey students who were absent, for one reason, or another, the day the survey was administered as the writer perceived the answers might be distorted if students had an opportunity to discuss the items with their peer group before taking the survey. It was determined that total absenteeism was approximately 10% of the total enrollment in the two school's vocational agriculture classes.

Statistical analysis of the survey responses were handled in the following manner: A response of "high" interest was assigned a value of five points, a response of "medium" interest was assigned a value of 3 points and a response of "low" interest was assigned a value of 1 point. A weighted average interest score was then computed for each of the 65 areas by adding the five three, and one point responses together and dividing by the number of students who completed the survey. Total sum average scores were computed by adding the boy and girl scores for each item from the Arkansas City and Central High Schools and then dividing by two.

Chapter II

RELATED INFORMATION

There have been a few studies done in areas related to vocational interests of boys enrolled in vocational agriculture but research data which has analyzed the comparison of boys and girls' vocational interests is rather limited at the present. However, the studies which have been completed regarding the vocational interests of boys, might have some implications related to this study.

In separate studies completed by Farrell and Gross³, it was concluded that the curriculums in those two schools in Kansas were definitely meeting the needs of the students enrolled in vocational agriculture. Both writers were quick to point out that certain areas were more meaningful to students than others. Both authors agreed that one of the truest tests of the effectiveness of a vocational agriculture curriculum, is to determine the extent of the use of the instruction by the students upon graduation from high school.

Gross also recommended that more emphasis should be placed upon the vocational agriculture subject matter areas of instruction which were found to be of greater value on the job and in the home.

A study completed by Fanning⁴ revealed that more emphasis should be placed on career opportunities in vocational agriculture in the lower

³William Ralph Gross, A Follow-up Study of Riley County High School Vocational Agriculture Graduates 1960-1971 (A Master's Report, Kansas State University, 1973).

⁴Terry Dean Fanning, "A Study of Conditions Which Affected the Choice of Either an Agricultural Education Major or Other Agriculture Major" (A Master's Report, Kansas State University, 1969).

grades (9-10) in order that the entire curriculum would become more meaningful to those enrolled in a course of study in vocational agriculture.

A study done by Super⁵ advocated favorably a need for career orientation in vocational agriculture as low as the eighth or maybe even seventh grade. They stated that less than one half of the ninth-graders studied had done anything about getting information on which to base high school plans. Boys had some knowledge of occupational requirements but the duties, conditions of work, and other important characteristics of the occupation was found to be badly limited.

In a study in Kentucky, Bruce⁶ indicated that boys enrolled in vocational agriculture because of their interest and their ability to have supervised practice programs. It was also stated that classes should be geared to further meet the interests of these boys.

Bail⁷ of Arizona found that course content and class schedules should be planned to meet the needs of all students including college-bound students interested in agriculture and introductory courses should include basic principles of science related to agriculture. Bail also found that FFA activities should be related to agriculture, and should be an integral part of the program of instruction, and should be available to any student enrolled in agriculture.

⁵Donald E. Super and others, The Vocational Maturity of Ninth Grade Boys (New York, Teachers College, Columbia University, 1960).

⁶Herbert H. Bruce Jr. "A Study of Factors Related to the Enrollment of High-School Boys in Vocational Agriculture in Kentucky." (Ph. D. Dissertation, University of Kentucky, Lexington, 1965).

⁷Joe Paul Bail. "Agricultural Education at the High School Level in Arizona." (Staff Study, University of Arizona, Tucson, 1965).

It appeared that more emphasis needed to be placed on fitting the curriculum to the interests of the students. Research also tended to indicate that career orientation at the junior high level could increase the effectiveness of the present high school vocational agriculture curriculums.

Chapter III

ANALYSIS OF DATA

Information in Chapter III includes an analysis of the curricular interests in vocational agriculture of the students at Arkansas City, and Central of Burden High Schools. A comparison of the weighted average interest scores of the boys and girls at the two schools is included in the analysis. Student interest was determined for the curricular areas of animal science, crops and soils, agricultural mechanics, horticulture, agribusiness management, and FFA activities.

The curricular interests are expressed in terms of weighted average and sum average scores. A Likert type scale was used to determine weighted average scores for each curricular area of interest. Each "low" interest response was given a value of one, each "medium" interest response was given a value of 3, and each "high" interest response was given a value of 5. The weighted average values were determined by dividing the accumulated values attained by the number of respondents in each of the boy and girl sub-groups for Arkansas City and Central High Schools. The sum averages were determined by adding the weighted average scores for the boys and the girls in each of the two schools and then dividing by two.

Information concerning student interest in animal science is presented in Table I. For the most part, there seems to be a close relationship between the vocational interest of boys and girls in this area. However, it can be noted that the weighted average interest scores for boys in feeding was 3.5 while the weighted average interest scores for girls was 2.9. (Hereafter the weighted average interest

scores will be referred to as average interest.) The boys had a 2.5 average interest for showing and fitting while the girls expressed an average interest of 3.5 in showing and fitting. The sum average scores of all animal science areas was an identical 3.3 for both boys and girls. (Hereafter sum average scores will be referred to as total average interest.) Both the boys and the girls in the Arkansas City High School had higher average interest scores than the boys and girls in the Central High School. Arkansas City is considered to be a center for livestock activities including the Mauer Nuer Packing Plant and the host of numerous shows each year.

TABLE I

COMPARISON OF THE INTERESTS IN ANIMAL SCIENCE OF THE BOYS AND GIRLS ENROLLED IN VOCATIONAL AGRICULTURE AT THE ARKANSAS CITY AND CENTRAL HIGH SCHOOLS.

Animal Science Activities	Arkansas City		Central		Total	
	Boys	Girls	Boys	Girls	Boys	Girls
Selection	3.4	4.0	2.8	2.8	3.1	3.4
Breeding	3.7	3.9	2.4	2.9	3.6	3.4
Feeding	3.6	3.1	3.3	2.7	3.5	2.9
Fitting and Showing	2.9	3.9	2.1	3.1	2.5	3.5
Diseases	3.7	3.9	3.1	2.5	3.4	3.2
Management	3.6	4.0	3.0	2.7	3.3	3.4
Total Average	3.5	3.8	3.0	2.8	3.3	3.3

*Rounded off to the closest tenth.

**Low interest = 1

Medium interest = 3

High interest = 5

In Table II, the interest in Crops and soils indicated a great degree of correlation between the average interest of the boys and girls. The boys expressed more interest in the areas of fertilization, harvesting, storing, marketing and diseases while the girls expressed more interest in varieties, identification, and judging. Identical interests were shown in conservation and cultural practices for both groups. There seemed to be a wide range of interests among the boys. Judging ranked the lowest in interest with only a 1.9 average interest score for boys and a 2.4 average interest score for girls. Harvesting received an average interest rating of 3.7 for boys and 3.3 for girls. The girls did not indicate a very large difference in their curricular interests; the most popular areas being conservation(3.0) and harvesting (3.3) The total average interest for crops and soils was the same for boys and girls. (2.7)

TABLE II

COMPARISON OF THE INTERESTS IN CROPS AND SOILS OF THE BOYS AND GIRLS ENROLLED IN VOCATIONAL AGRICULTURE AT THE ARKANSAS CITY AND CENTRAL HIGH SCHOOLS.

Crops and Soils	Arkansas City		Central		Total	
	Boys	Girls	Boys	Girls	Boys	Girls
Varieties	2.0	2.7	2.8	2.2	2.4	2.5
Identification	2.5	3.1	2.6	2.7	2.6	2.9
Judging	1.9	2.0	1.8	2.3	1.9	2.4
Fertilization	2.8	2.4	2.8	2.3	2.8	2.4
Conservation	2.8	3.1	3.1	2.9	3.0	3.0
Harvesting	3.6	3.3	3.7	3.2	3.7	3.3
Storing	2.8	2.7	2.9	2.1	2.9	2.4
Marketing	2.8	2.7	3.2	3.0	3.0	2.9
Diseases	2.7	2.7	3.2	2.5	2.9	2.6
Cultural Practices	1.8	2.0	2.2	2.0	2.0	2.0
Total Average	2.6	2.7	2.8	2.6	2.7	2.7

*Rounded off to the closest tenth.

**Low interest = 1

Medium interest = 3

High interest = 5

The responses of students in Table III gave the comparative interests between boys and girls in agricultural mechanics. Here it indicated that the boys had a much more pronounced interest in this area than the girls. With the exception of safety instruction and soils surveying, the boys' interest was consistently higher than the girls. The most noticeable variation in interest was in small engine repair. In this area, the boys had an average interest of 3.7 while the girls had an average interest of only 2.4. There was also a significant difference between the interest of girls and boys in welding. The boys expressed a 4.3 average interest in welding and the average interest of the girls was 3.2. The boys' lowest average interest was in soil surveying (2.2) and the girls' lowest average interest was in farm electrification (2.1). The boys' highest area of interest was welding (4.3) while the girls were most interested in safety instruction (3.6). Information in Table III further indicated that the total average interest for boys in agricultural mechanics was 3.3 and for girls it was 2.6.

TABLE III

COMPARISON OF THE INTERESTS IN AGRICULTURAL MECHANICS OF THE BOYS AND GIRLS ENROLLED IN VOCATIONAL AGRICULTURE AT THE ARKANSAS CITY AND CENTRAL HIGH SCHOOLS.

Agricultural Mechanics	Arkansas City		Central		Total	
	Boys	Girls	Boys	Girls	Boys	Girls
Safety Instruction	3.6	3.7	3.4	3.4	3.5	3.6
Use of Hand Tools	3.6	3.3	3.5	3.1	3.6	3.2
Use of Power Tools	4.1	3.4	3.3	3.2	3.7	3.3
Welding	4.4	3.2	4.2	3.1	4.3	3.2
Small Engine Repair	4.1	2.5	3.3	2.2	3.7	2.4
Tractor and Machinery Maintenance	3.8	2.7	2.4	2.1	3.1	2.4
Farm Electrification	3.1	2.0	2.4	2.1	2.9	2.1
Soil Survey	2.0	2.7	2.4	2.4	2.2	2.6
Concrete	2.7	2.1	2.5	2.2	2.6	2.2
Carpentry Construction	3.5	3.5	3.0	2.5	3.3	3.0
Metal Construction	3.8	2.7	3.3	2.0	3.6	2.4
Total Average	3.5	2.9	3.1	2.3	3.3	2.6

*Rounded off to the closest tenth.

**Low interest = 1

Medium interest = 3

High interest = 5

The data compiled in Table IV expressed the students vocational interests in Horticulture. It can be noted that the average interests of girls was decidedly higher in horticulture than were the interests for the boys. In fact, there were no areas where the boys had expressed more interest than the girls. The girls indicated their highest areas of interest were gardening (4.3), varieties of grasses, trees and shrubs (3.5), and turf grass management (3.4). For the boys, the three highest areas of interest were gardening (2.8), identification of grasses, trees, and shrubs (2.5) and landscaping (2.5). The boys and girls indicated the least interest in horticultural plant insects with 1.7 for the boys and 2.4 for the girls. The average interest scores for girls for all horticultural areas was 3.2 and the boys had an average interest of 2.1. The interest of the boys and girls in horticulture for each of the two schools were nearly identical.

TABLE IV

COMPARISON OF THE INTERESTS IN HORTICULTURE OF THE BOYS AND GIRLS ENROLLED IN VOCATIONAL AGRICULTURE AT THE ARKANSAS CITY AND CENTRAL HIGH SCHOOLS.

Horticulture	Arkansas City		Central		Total	
	Boys	Girls	Boys	Girls	Boys	Girls
Varieties of grasses, trees, and shrubs	2.3	3.3	2.2	3.6	2.3	3.5
Identification of grasses, trees, and shrubs	2.6	3.3	2.4	3.3	2.5	3.3
Judging of vegetables, fruits, and ornamentals	1.7	3.0	1.8	2.9	1.8	3.0
Landscaping	2.4	3.6	2.6	2.9	2.5	3.3
Gardening	2.8	4.2	2.7	4.3	2.8	4.3
Turf management	2.1	2.6	2.1	4.2	2.1	3.4
Nursery management	1.8	3.3	1.7	3.2	1.8	3.3
Greenhouse management	1.8	3.3	1.8	3.2	1.8	3.3
Pruning and grafting	1.8	2.7	1.7	2.5	1.8	2.6
Horticultural plant diseases	1.8	2.7	1.7	2.5	1.8	2.6
Horticultural plant insects	1.4	2.6	2.0	2.2	1.7	2.4
Total Average	2.0	3.1	2.1	3.2	2.1	3.2

*Rounded off to the closest tenth.

**Low interest = 1

Medium interest = 3

High interest = 5

A comparison of interest in agribusiness management of boys and girls is given in Table V. The composite interest in Agribusiness management indicated that the total average interest score for boys and for girls were identical. Girls ranked their interest in human relations as the highest (3.7) and government agencies the lowest (1.8). The boys ranked planning the livestock system the highest (3.5) and their interest in government agencies was their lowest. The girls indicated more interest than the boys in salesmanship (3.1) as compared to (2.4) and human relations (3.7) as compared to (2.6), record keeping (3.5) as compared to (2.9), advertising (3.4) as compared to (2.4), and marketing (3.5) as compared to (3.0). The boys indicated a higher average interest in livestock planning (3.5) as compared to (3.4) for the girls, planning the crops system (3.0) as compared to (2.6), farmstead planning (3.4) as compared to (2.9), credit and financing (3.0) as compared to (2.7), agricultural machinery management (3.4) as compared to (2.4), and labor management (3.1) as compared to (2.7).

In summary information in Table V indicated that the boys had more interest in areas dealing with planning, financing, and management, while the girls were more interested in human relations, record keeping, and business related skills.

TABLE V

COMPARISON OF THE INTERESTS IN AGRIBUSINESS MANAGEMENT OF THE BOYS AND GIRLS ENROLLED IN VOCATIONAL AGRICULTURE AT THE ARKANSAS CITY AND CENTRAL HIGH SCHOOLS.

Agribusiness Management	Arkansas City		Central		Total	
	Boys	Girls	Boys	Girls	Boys	Girls
Planning the Live-stock System	3.4	4.0	3.6	2.8	3.5	3.4
Planning the Crop System	2.8	2.7	3.2	2.4	3.0	2.6
Farmstead Planning	3.4	3.2	3.4	2.5	3.4	2.9
Credit and Financing	3.2	3.1	2.7	2.3	3.0	2.7
Government Agencies	2.4	1.9	2.0	1.7	2.2	1.8
Agricultural Law	2.5	2.9	2.6	2.2	2.6	2.6
Agriculture Machinery Management	3.3	2.8	3.5	2.0	3.4	2.4
Labor Management	3.5	3.2	2.7	2.2	3.1	2.7
Wills, trusts, investments, and real estate	2.9	2.4	2.5	2.6	2.7	2.5
Salesmanship	2.6	3.4	2.1	2.7	2.4	3.1
Human Relation	2.6	3.7	2.6	3.7	2.6	3.7
Record Keeping	3.1	3.5	2.6	3.4	2.9	3.5
Advertising	2.5	3.3	2.2	3.4	2.4	3.4
Distribution	2.5	3.0	2.5	2.3	2.5	2.7
Marketing	3.1	4.0	2.9	2.9	3.0	3.5
Total Average	2.9	3.1	2.8	2.6	2.9	2.9

*Rounded off to the closest tenth.

**Low interest = 1

Medium interest = 3

High interest = 5

Responses from students concerning this interest in FFA activities are given in Table VI. The sum weighted average scores for interest was higher for girls (3.3) than for boys (2.6). The girls weighted average interest scores ranked higher in every area than the scores for the boys. The top three areas of interest for the girls were participation in committee work (3.7), participation in leadership activities (3.6), and participation in leadership camps (3.5). The boys expressed the most interest in applying for FFA degree achievements (2.8), followed closely by participation in leadership activities (2.7). The boys were the least interested in public speaking and participation in leadership schools both with interest scores of (2.2). The girls ranked keeping FFA leadership records and participation in civic activities as their areas of least interest with average interest scores of 3.0 for each. Both the boys and girls at Arkansas City scored higher than the boys and girls at Central High School. Arkansas City High School students in agricultural have had a long list of accomplishments in FFA activities, whereas Central High School at Burden has had vocational agriculture and FFA for only two years.

TABLE VI

COMPARISON OF THE INTERESTS IN FFA ACTIVITIES FOR THE BOYS AND GIRLS ENROLLED IN VOCATIONAL AGRICULTURE AT THE ARKANSAS CITY AND CENTRAL HIGH SCHOOLS.

FFA Activities	Arkansas City		Central		Total	
	Boys	Girls	Boys	Girls	Boys	Girls
Parliamentary Procedure	2.7	3.7	1.8	2.4	2.3	3.1
Public Speaking	2.3	3.6	2.0	2.8	2.2	3.2
Keeping FFA Leadership Records	2.5	3.8	2.0	2.8	2.3	3.0
Build FFA Program of Work	2.6	3.9	2.6	2.4	2.6	3.2
Participation in Community Service	2.6	3.6	2.6	2.8	2.6	3.2
Participation in Civic Activities	2.5	3.4	2.2	2.5	2.4	3.0
Participation in Leadership Schools	2.2	3.4	2.1	2.9	2.2	3.2
Participation in Leadership Camps	2.4	3.7	2.3	3.2	2.4	3.5
Participation in Committee Work	2.4	4.3	2.6	3.0	2.5	3.7
Applying for FFA Foundation Awards	2.9	3.8	2.3	2.7	2.6	3.3
Applying for FFA Degree Achievement	2.8	3.9	2.7	2.3	2.8	3.1
Participation in Leadership Activities (officers, committee chairman, etc.)	2.7	4.0	2.7	3.1	2.7	3.6
Total Average	2.8	3.8	2.3	2.7	2.6	3.3

Information in Table VII gave a summary of the vocational interests of the boys and girls enrolled in vocational agriculture at Arkansas City and Central of Burden high schools. As can be seen from the chart, girls ranked animal science and FFA activities at the top of their list (3.3) followed by horticulture (3.2), agribusiness management (2.9), crops and soils (2.7), and agricultural mechanics (2.6). The boys topped their list with agricultural mechanics and animal science (3.3). In third place, they indicated interest in agribusiness management (2.9), followed by crops and soils (2.7), FFA activities (2.6), and horticulture (2.1).

A further study of Table VII indicated that boys and girls expressed identical interest in animal science, crops and soils, and agribusiness management with the girls showing more interest in FFA activities and horticulture and the boys indicated more interest in agricultural mechanics.

TABLE VII

SUMMARY OF VOCATIONAL INTERESTS OF THE BOYS AND GIRLS ENROLLED IN VOCATIONAL AGRICULTURE AT ARKANSAS CITY AND CENTRAL OF BURDEN HIGH SCHOOLS.

Vocational Area	Arkansas City		Central		Total	
	Boys	Girls	Boys	Girls	Boys	Girls
Animal Science	3.5	3.8	3.0	2.8	3.3	3.3
Crops and Soils	2.6	2.7	2.8	2.6	2.7	2.7
Agricultural Mechanics	3.5	2.9	3.1	2.3	3.3	2.6
Horticulture	2.0	3.1	2.1	3.2	2.1	3.2
Agribusiness Management	2.9	3.1	2.8	2.6	2.9	2.9
FFA Activities	2.8	3.8	2.3	2.7	2.6	3.3

Chapter IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

The study was designed to discover the vocational interest of boys and girls enrolled in the Arkansas City and Central of Burden High Schools. The author also hoped to discover what areas of the vocational agriculture curriculum might need to be changed as a result of the findings.

Data was collected through a vocational interests survey which was given to those students enrolled in vocational agriculture at Arkansas City and Central of Burden. The population consisted of 51 boys and 23 girls from Arkansas City and 52 boys and 26 girls from central of Burden.

The survey consisted of 65 items which each student was asked to rank according to "low", "medium", or "high" interest in that area of vocational concern.

An average interest was calculated by assigning values of one, three, and five to responses of low, medium, and high, respectively, and adding this total together and dividing by the number of students completing the survey. Average scores were calculated for: 1) Arkansas City girls, 2) Arkansas City boys, 3) Central girls, 4) Central boys 5) Total girls and 6) Total boys.

Findings in the study indicated that there was a positive correlation in the interests of boys and girls at both Arkansas City and Central High Schools. There were some exceptions however and these were indicated in both tabular and written forms. The average interest scores for Animal Science were nearly the same for both boys and girls

at Arkansas City the total average interests for boys and girls for the two schools were identical (3.3). The girls at Arkansas City High School had the highest total average interest of (3.8) for animal science followed by the boys at Arkansas City (3.5), the boys at Central High Schools (3.0) and the girls at Central (2.8) with the least interest in animal science activities.

The student interest in Crops and Soils was lower (2.7) than for animal science. Low average interest was expressed by both boys (1.9) and girls (2.4) for crops judging and for cultural practices (2.0). The greatest interests was expressed for harvesting with 3.7 for boys and 3.3 for girls. Both boys and girls indicated their interest in conservation at 3.0. The overall interest by boys and girls in crops and soils curricular areas was very similar.

It was reported that boys were considerably more interested in Agricultural Mechanics than the girls. Both groups were interested in safety instruction, use of hand tools, use of power tools, welding, and carpentry construction with both groups expressing an interest rating of 3.0 or more. However the interest of the boys exceeded the interest of the girls in all of the curricular areas except for "safety instruction" and "soil survey." The areas of "farm electrification," "soil survey," and "concrete" were the only curricular areas in agricultural mechanics with an average interest of less than 3.0 for both groups.

The girls (3.2) at both Arkansas City and Burden High Schools scored considerably higher than boys (2.1) on their average interest in Horticulture. Gardening was the most interesting curricular area to both girls (4.3) and boys (2.8). Girls had the next most interest in varieties of grasses, trees, and shrubs (3.5) and considerable interest in the other curricular

areas. Boys expressed good interest in identification of grasses, trees, and shrubs, and landscaping both with 2.5 interest ratings.

The total interest of the boys and girls at both schools indicated identical ratings of 2.9 for the curricular areas in Agribusiness Management. Boys were the most interested in "Planning the livestock system" (3.5), "Farmstead planning" (3.4), "Agriculture machinery management", and "labor management" (3.1). Girls were the most interested in "Human relations" (3.7), "Record Keeping" (3.5), "Marketing" (3.5), "Planning the livestock system" (3.4), "Advertising" (3.4), and "Salesmanship" (3.1).

The total interest in FFA Activities was greater for girls (3.3) than boys (2.6). This was especially true at Arkansas City High School where girls were very active in FFA leadership activities and had an interest rating of (3.8) compared to (2.8) for the boys. The total interest of the girls was one point (1.0) or more for the following FFA activities of "Public speaking," "Participation in leadership schools," "Participation in leadership camps," and "Participation in committee work." Both boys and girls at Arkansas City had higher interest in FFA activities than the boys and girls at Central High School.

The total overall interest scores by boys and girls at the Arkansas City and Central High Schools were identical for Animal Science (3.3), Crops and Soils (2.7), and Agribusiness Management (2.9). The interest of girls was greater than boys for Horticulture (3.2) compared to (2.1), and FFA Activities (3.3), compared to (2.6). The interest of boys (3.3) was greater than that of girls (2.6) in the curricular area of Agricultural Mechanics.

It was found girls were most interested in Animal Science and FFA activities (3.3), followed by horticulture (3.2), agribusiness management (2.9), crops and soils (2.7), and agricultural mechanics (2.6).

The boys were most interested in agricultural mechanics and animal science (3.3). In third place they indicated interest in agribusiness management (2.9), followed by crops and soils (2.7), FFA activities (2.6), and horticulture (2.1).

II. CONCLUSIONS

The following conclusions were made as a result of the study:

1. Girls are most interested in studying animal science--particularly showing and fitting--and in FFA activities--in most every area.
2. Girls also expresses a high interest in horticulture with particular emphasis on gardening and plant identification.
3. Girls were least interested in agricultural mechanics skills.
4. Boys were most interested in agricultural mechanics and animal science. They were particularly interested in welding and livestock breeding and feeding.
5. Boys showed little interest in horticulture.
6. The results of this study indicated that in the areas where boys and girls were both interested the degree of interest seemed to correlate concerning materials offered within that area.
7. In areas where boys and girls interests differed there was however a correlation of the interests concerning the materials offered within that curricular area indicating that semester courses would give students greater curriculum flexibility.

III. RECOMMENDATIONS

1. Based upon related information and the response of students surveyed, this writer recommends implementation of an agriculture career orientation course for eighth grade students.

2. This writer recommends that a follow-up study be completed three years after the Agriculture Careers course is begun.

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APPENDIX

VOCATIONAL INTEREST QUESTIONNAIRE

Name _____

Grade _____

School _____

Age _____

Parents Occupation _____

Please place a check in the blanks which most closely indicates your interest in the following instructional areas:

	<u>High</u>	<u>Medium</u>	<u>Low</u>
<u>Animal Science</u>			
Selection	_____	_____	_____
Breeding	_____	_____	_____
Feeding	_____	_____	_____
Fitting and Showing	_____	_____	_____
Management	_____	_____	_____
Diseases	_____	_____	_____

Crops and Soils

Varieties	_____	_____	_____
Identification	_____	_____	_____
Judging	_____	_____	_____
Fertilization	_____	_____	_____
Conservation	_____	_____	_____
Harvesting	_____	_____	_____
Storing	_____	_____	_____
Marketing	_____	_____	_____
Diseases	_____	_____	_____
Cultural Practices	_____	_____	_____

	<u>High</u>	<u>Medium</u>	<u>Low</u>
<u>Agricultural Mechanics</u>			
Safety Instruction	_____	_____	_____
Use of hand tools	_____	_____	_____
Use of power tools	_____	_____	_____
Welding	_____	_____	_____
Small engine repair	_____	_____	_____
Tractor and machinery maintenance	_____	_____	_____
Farm electrification	_____	_____	_____
Soil surveying	_____	_____	_____
Concrete	_____	_____	_____
Carpentry Construction	_____	_____	_____
Metal Construction	_____	_____	_____

Horticulture

Varieties of grasses, trees, and shrubs	_____	_____	_____
Identification of grasses, trees, and shrubs	_____	_____	_____
Judging of vegetables, fruits, and ornamentals	_____	_____	_____
Landscaping	_____	_____	_____
Gardening	_____	_____	_____
Turf Management	_____	_____	_____
Nursery Management	_____	_____	_____
Greenhouse Management	_____	_____	_____
Pruning and Grafting	_____	_____	_____
Horticultural plant diseases	_____	_____	_____

(Horticulture continued)	<u>High</u>	<u>Medium</u>	<u>Low</u>
Horticultural plant insects	_____	_____	_____
<hr/>			
<hr/>			

Agribusiness Management

Planning the livestock system	_____	_____	_____
Planning the crop system	_____	_____	_____
Farmstead planning	_____	_____	_____
Credit and Financing	_____	_____	_____
Government Agencies	_____	_____	_____
Agricultural Law	_____	_____	_____
Agriculture Machinery Management	_____	_____	_____
Labor Management	_____	_____	_____
Wills, trusts, investments, and real estate	_____	_____	_____
Salesmanship	_____	_____	_____
Human Relations	_____	_____	_____
Record Keeping	_____	_____	_____
Advertising	_____	_____	_____
Distribution	_____	_____	_____
Marketing	_____	_____	_____

FFA Activities

Parliamentary Procedure	_____	_____	_____
Public Speaking	_____	_____	_____
Keeping FFA Leadership Records	_____	_____	_____

(FFA Activities continued)	<u>High</u>	<u>Medium</u>	<u>Low</u>
Build FFA Program of Work	_____	_____	_____
Participation in Community Service	_____	_____	_____
Participation in Civic Activities	_____	_____	_____
Participation in Leadership Schools	_____	_____	_____
Participation in Leadership Camps	_____	_____	_____
Participation in Committee Work	_____	_____	_____
Applying for FFA Foundation Awards	_____	_____	_____
Applying for FFA Degree Advancement	_____	_____	_____
Participation in Leadership activities (officers, committee chairmen, etc.)	_____	_____	_____

A COMPARATIVE STUDY OF VOCATIONAL
INTERESTS OF BOYS AND GIRLS ENROLLED IN
VOCATIONAL AGRICULTURE AT ARKANSAS CITY
AND CENTRAL OF BURDEN HIGH SCHOOLS IN 1973-74

by

KENNETH W. BOWIE

B. S., KANSAS STATE UNIVERSITY, 1971

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

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MASTER OF SCIENCE

Agricultural Education
College of Education

KANSAS STATE UNIVERSITY
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1974

The study was designed to discover the vocational interests of boys and girls enrolled in the Arkansas City and Central of Burden High Schools. The author also hoped to discover what areas of the vocational agriculture curriculum might need to be changed as a result of the findings.

The objectives of this study are: 1) to determine the differences of vocational interests between boys and girls enrolled in Vocational Agriculture at Arkansas City and Central of Burden High Schools. 2) To discover how the vocational agriculture curriculum might be changed to better meet the interest of all students enrolled.

The population consisted of 51 boys and 23 girls from Arkansas City and 52 boys and 26 girls from Central of Burden. Data was collected through a vocational interests survey which was given to those students enrolled in vocational agriculture at Arkansas City, and Central of Burden, High Schools. The survey consisted of 65 items which each student was asked to rank according to "low", "medium", or "high" interest in that area of vocational concern.

An average interest was calculated by assigning values of one, three, and five to responses of low, medium, and high, respectively, adding this total together and dividing by the number of students completing the survey. Average scores were calculated for: 1) Arkansas City girls, 2) Arkansas City boys, 3) Central girls, 4) Central boys, 5) total girls, and 6) total boys.

It was found girls were most interested in Animal Science and FFA activities (3.3), followed by horticulture (3.2), agribusiness management (2.9), crops and soils (2.7), and agriculture mechanics (2.6).

The boys were most interested in agriculture mechanics and animal science (3.3). In third place they indicated interest in agribusiness management (2.9), followed by crops and soils (2.7), FFA activities (2.6), and horticulture (2.1).

The results of this study appear to have implications for curriculum development at the junior and senior high levels.

The following conclusions were made as a result of the study:

1. Girls are most interested in studying animal science--particularly showing and fitting--and in FFA activities--in most every area.

2. Girls also expressed a high interest in horticulture with particular emphasis on gardening and plant identification.

3. Girls were least interested in agricultural mechanics skills.

4. Boys were most interested in agricultural mechanics and animal science. They were particularly interested in welding and livestock breeding and feeding.

5. Boys showed very little interest in horticulture.

6. The results of this study indicates that in the areas where boys and girls are both interested the degree of interest seems to correlate concerning materials offered within that area.

7. In areas where interests of boys and girls differed there was however a correlation of interests concerning subject matter within each curricular area indicating that semester courses would give students greater curriculum flexibility.

Based upon related information and the responses of students surveyed, the writer recommends:

1. The implementation of an agriculture career orientation course for eighth grade students.

2. A follow-up study three years after the agriculture careers course has begun.