

A FOLLOW-UP STUDY OF 1973-74 OKLAHOMA
VOCATIONAL AGRICULTURE COMPLETERS

By

ALBERT BYRON JOHNSON, JR.

Bachelor of Science
Louisiana Tech University
Ruston, Louisiana
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Master of Science
Louisiana Tech University
Ruston, Louisiana
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Thesis Approved:

James P. Key
Thesis Adviser
Jack Fitchard
Robert Terry
Kenneth H. Clari
Norman N. Durham
Dean of the Graduate College

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CHAPTER I

INTRODUCTION

With the inception of the Smith-Hughes Act of 1917, vocational agriculture in secondary schools experienced its first federal funding. Since that time, vocational agriculture has consistently contributed to the advancement of agriculture by providing opportunities for young people to become leaders and solve problems.

Traditionally, vocational agriculture has been funded by private, local, state and federal funds. Subsequent legislation since the Smith-Hughes Act has strengthened and increased financial support to vocational education in agriculture.

The "Education Amendments of 1976" encouraged accountability of all educational programs in meeting the needs of their clients. If it is to survive, vocational agriculture must be especially sensitive to the unique clientele. Because of the national scope of the vocational agriculture programs, geographical regions of the country could be surveyed to determine the impact of the vocational agriculture program. The concept of a Southern Region follow-up study evolved from the Southern Research Conference in Agricultural Education in July, 1977, at Lexington, Kentucky. Data for a regional study was needed but not available. The most practical method of accomplishing such a task was by conducting individual state follow-up studies in the region and combining them into a regional report.

This study represents the data collected and analyzed in the State of Oklahoma. Other states participating in the regional study were Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Texas and Virginia.

The future success of any educational program is determined at the local level. Hemp (1, p. 187) stated that, "Placement and follow-up activities should be an integral part of all vocational education programs. . . . Only through follow-up can a teacher effectively evaluate his teaching." Evaluation of the results of a follow-up study provides a basis for educators to adjust their programs. Guidelines must be constructed to satisfy the needs of present students.

The primary source of data evolves from former students who have completed training in the specific educational program that is being evaluated. Huber and Williams (2) confirmed that graduates are a source of data that can be used in evaluating a curriculum.

This study was concerned with demographic data and opinions of former students concerning their vocational agriculture program in Oklahoma.

Statement of the Problem

Follow-up studies have traditionally been done at the local or state level. The variability in these studies is reflected by the differences in the writers' objectives. Drake (3) indicated that national and state evaluations too often produce data about "head counts" related to accountability of expenditures rather than to objectives. Berkey (4) stated that product evaluation is rightfully receiving increased emphasis in vocational education. Elson (5)

proposed that for improvement in vocational education, a comprehensive program evaluation should be conducted.

A regional study made up of state studies should be conducted to indicate the impact and successfulness of the vocational agriculture program. Data for Oklahoma is needed to contribute to the Southern Regional Report.

Purpose of the Study

The purpose of this study was to ascertain the occupational status of 1973-74 Oklahoma vocational agriculture completers along with other demographic data as well as their opinions concerning certain aspects of their vocational agriculture program.

Objectives of the Study

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

1. To determine the current status of vocational agriculture "completers" for the selected year with regard to occupation, further education, economic level and other demographic factors.
2. To ascertain the perceived value of the various components of the vocational agriculture program as indicated by the respondents.
3. To secure the perceptions of program completers to recent and proposed changes in the vocational agriculture program.

Assumptions

The following assumptions were made for the purpose of this study:

1. The respondents comprehended the items on the survey

instrument and answered honestly and frankly.

2. All respondents were correctly identified as being program completers.

Scope of the Study

The population of this study consisted of only 1973-74 vocational agriculture completers as identified by their vocational agriculture teachers. This roster was provided by the Oklahoma State Department of Vocational and Technical Education, Stillwater, Oklahoma.

Limitations of the Study

The results of the study are entirely dependent upon the respondents in the sample.

Obtaining accurate addresses of the respondents was dependent upon the cooperation of school principals and their vocational agriculture teachers. Many students were difficult to trace after five years. Also, principals and/or vocational agriculture teachers had changed in some schools.

Definitions

Vocational agriculture - refers to a course taught in high schools designed to train present and prospective persons for careers in agriculture; may have a production or agri-business emphasis or both.

Vocational agriculture completer - any student who completed three or more years of vocational agriculture and/or graduated from a department accredited and approved by the State Department of Vocational and Technical Education in Oklahoma in the 1973-74 school year.

CHAPTER II

REVIEW OF LITERATURE

In this review of literature the following areas were considered:

- (1) Need for follow-up studies
- (2) Occupations of former vocational agriculture completers
- (3) Factors related to occupational status.

Need for Follow-up Studies

Vocational educators have long recognized the value of follow-up studies to satisfy needs for data concerning educational programs. Data obtained from follow-up activities is utilized in making decisions to effect program improvement.

Tart (6, p. 308) defined evaluation as "the process of assessment and appraisal for the purpose of making rational decisions."

Program evaluation as viewed by Elson (5, p. 10) is, "the process of gathering and analyzing those data necessary for appraising alternatives." He recommends an annual and five-year evaluation for improving vocational education.

The importance of evaluation is increased by three factors according to Dittenhafer (7). They are: 1) Federal government funding which is substantial, 2) concern of students relating to the relevancy of their education, and 3) taxpayer complaints about rising costs. These factors require educators to recognize a need to evaluate their

practices. Dittenhafer is a proponent of formative evaluation, an ongoing process.

Huber and Williams (2) stated that,

Systematic and continuous evaluation of a vocational education program requires the collection and analysis of various kinds of information. Data must be collected to determine the extent to which program objectives are being achieved (p. 194).

They quote sharp and Krasnegor on the purpose of follow-up studies which require contact with former students as "The usual goal of such studies is to arrive at some measure of the impact of the experience on the subsequent behavior or status of these individuals" (p. 194).

More emphasis is being placed on "product" evaluation rather than "process" evaluation. Berkey (4) said,

The key to improving vocational programs is continued assessment of program effectiveness which means follow up of graduates in the world of work. Process evaluation procedures typically used in the past have had a useful function, but the 'proof of the program' is the product (p. 198).

Drake (3) agreed with this position. He stated:

When we apply such a 'process' approach, we assume that something is deficient in our procedures and methods. And this assumption is too often made prior to any systematic examination of our 'product.' It is the graduate we send away from our program that is the real proof of our accountability. . . . And the performance of our 'product' is the vital objective of evaluation (p. 300).

According to Warmbrod (8), two approaches to evaluation in vocational education are follow-up studies of former graduates and cost-benefit analyses. He warns, however, that either has the potential of influencing objectives unduly, if not defining them, when used improperly or exclusively. To be more valuable, the follow-up study should include information other than the rate of employment related to training. Social and economic factors affecting employment should also be

considered. Objectives of vocational education must not be ignored when conducting follow-up studies.

Two Ford Foundation Program Associates are quoted as saying, "Vocational educators need to look at their teaching more in terms of what it does for the child and less in terms of how well it meets someone's forecast of the community's industrial needs" (8, p. 300). A follow-up study should produce data related to all anticipated benefits of vocational education.

Drake (9) proposed that follow-up studies of vocational education terminees constitute one of the most valuable techniques for assessing the outcomes of agribusiness education programs. Program improvement and various phases of accountability are assets which evolve from follow-up studies.

Oliver (10) summed it up appropriately. He states:

Evaluation and planning are essential if vocational education is to be responsive to the needs of students, industry, and society. Evaluation provides a means for determining where programs are in relationship to goals and objectives. Planning involves making decisions about future courses of action with heavy reliance being placed upon the results of evaluation. The success of both evaluation and planning is greatly dependend (sic) upon one critical element--the availability of valid, reliable, and timely information (p. 15).

Occupations of Former Vocational

Agriculture Completers

Numerous follow-ups have been conducted on former students of vocational agriculture at the secondary level. Nearly all of these studies vary in some degree as related to sample size, criteria for being included in the sample, statistical treatment and especially

objectives which affect the findings, summary and conclusions. Classification of categories concerning former students were also different in many of the studies.

State and Regional Follow-up Studies

Oklahoma. In 1964, Edington and Hill (11) conducted a survey of 1959 through 1963 graduates of selected Oklahoma schools. Their data indicated that 18.16% were engaged in farming, 10.90% were involved in off-farm agricultural related occupations and 12.29% were enrolled in colleges of agriculture. They concluded that the needs of 41.35% of the graduates were being met and the remainder of approximately 59% were lacking in having their needs satisfied by the program. The prominent ones of this the latter group were the rural students with a non-farm background. They recommended that more studies be conducted concerning off-farm agricultural occupations.

The Oklahoma State Department of Vocational and Technical Education (12) conducted a one-year follow-up of the graduates pertinent to this study. The 1973-74 vocational agriculture completers were also followed up after a three-year interval. The first year data indicated that 53% were available for the labor force. Of those, 77% were employed in occupations related to their training while 19% were employed in unrelated areas. Part-time employment accounted for two percent and unemployment was two percent. Twenty-nine percent (29%) of those unavailable for the labor market were in school taking courses related to their vocational program. Those in school taking courses unrelated to their vocational program totaled 10%. Only one percent was unemployed and seven percent had an unknown status.

The data for the three-year follow-up indicated a change in status of some categories. The percentage available for the labor force increased to 65%. Seventy percent were employed in occupations related to their vocational program. Twenty-five percent (25%) were employed in unrelated occupations. Part-time employment was three percent and unemployment was two percent.

Students in school related to their vocational program composed 15% of those unavailable for the labor market. Seven percent were in unrelated courses and one percent was unavailable for employment. The percentage of unknown increased to 12% compared to 7% of the first year. No graduates were reported to be in the military in either year.

Texas. In a study of 1953 through 155 West Texas high school graduates, Eggenberger (13) found that 28.4% were farm operators and 14.5% were involved in farm related occupations. Additional graduates were also involved in part-time farming. Non-agricultural occupations accounted for 49.5% of the graduates and 6.4% were in the military.

Arkansas. Roberts (14) found that 86% of former students in Arkansas were employed in non-agricultural jobs. The data indicated that skills in agricultural mechanics were effectively used in non-farming occupations. The entire sample in the study had entered non-farming occupations.

South Dakota. In South Dakota, Priebe (15) found a change in jobs of 1959 graduates when reviewed over the period from 1959 to 1967. Forty-two and five-tenths percent (42.5%) were involved in agricultural occupations in 1959 as compared to 56.7% in 1967. Non-agricultural jobs increased from 10% in 1959 to 36.6% in 1967.

Washington. Magisos (16) investigated the status of graduates and drop-outs in Washington in the years 1955-56, 1958-59, 1961-62 and 1964-65. The respondents indicated that 10.78% were either part-time or full-time farmers while 15.75% were involved in off-farm agricultural occupations. Non-agricultural occupations accounted for 61.69%. Unemployment among former vocational agriculture students was only 0.33%.

Iowa. Iowa male graduates during the years of 1950 through 1954 were described by Robinson (17). The sample included graduates whose fathers were farming at the time of their graduation or had farmed during most of their high school careers and/or those who had completed six or more semesters of vocational agriculture. Of the respondents, 29.63% were either farming or farm managers, 13.31% were employed in off-farm agricultural occupations and 1.93% were farm laborers. Those employed in non-agricultural occupations accounted for 55.13%.

New York. The New York State Education Department (18) conducted a follow up of its 1965 graduates who completed programs in vocational agriculture. The percentage of those not available for placement totaled 42%. Continued full-time school accounted for 24.1%. The armed forces took 17.1% out of the labor force. All other reasons amounted to 0.8%. Those graduates in the labor force were categorized by the following: occupational trained, 25.6%; related occupations, 14.1%; other, 14.2%; and part-time, 0.7%. Unemployment was 1.2% and unknown status was 2.2%.

Also in New York, Berkey (19) found that 41% of 1968 graduates who had completed four units in vocational agriculture were employed. Of

those employed, 53% worked in the area in which they were trained. Most of those found jobs through informal job seek methods. The remainder of the graduates were accounted for as follows: military, 27%; college, 30%; other post-secondary education, 1%; and unemployed, 1%.

Berkey (4) also conducted a two-year follow-up for 1968 New York agricultural graduates to update his previous one-year follow-up. Thirty-nine percent (39%) of all graduates were reported to be employed. The military included 31% which represented an increase of four percent over the previous year. Twenty-seven percent (27%) were in college, other post-secondary education involved one percent and two percent were unemployed.

Of those graduates seeking employment, 98% were employed with 51% employed in the area for which they were trained.

Berkey (20), in an update of his survey of 1968 graduates in New York, conducted an investigation of 1968 and 1970 graduates.

Thirty-nine percent of 1968 graduates were employed compared with 47% of 1970 graduates. Military service took less of the 1970 graduates (13%) than 1968 graduates. Unemployment was higher for 1970 graduates (11%) as compared to two percent of the 1968 graduates. Nearly one-fourth of all graduates went to college with almost all attending two-year colleges.

Ohio. In a series of vocational agriculture graduate follow-up studies from 1952 to 1969 in Ohio, Bender (21) noted that fewer graduates are becoming established in farming. The decrease was not as great as the decrease in the number of farmers. More graduates were getting started on their home farms. Off-farm agricultural occupations and non-agricultural related occupations were increasingly employing

more graduates. Also, colleges and technical schools of agriculture were benefitting more from increased enrollment.

As of March 1, 1970, 37% of 1965 graduates were engaged in full-time and part-time farming. This compares to 30% for the 1969 class. Occupations related to farming employed 12% of the 1965 class and 13% of the 1969 class. Only 6% of 1965 graduates were attending a college of agriculture while 15% of 1969 graduates were attending a college or technical school of agriculture. In the analysis of graduates, 23% of 1965 graduates and 28% of 1969 graduates were unavailable for the labor force due to military service, unknown occupations, unemployment or death. Unemployment accounted for 7% of the 1965 class and only 1.9% of the 1969 class.

Virginia. Bass (22) surveyed students who completed one or more years of vocational agriculture in Virginia and found that 35.11% completed four or more years of vocational agriculture. The students left a high school during the years 1954 through 1966. Fifteen and eight-hundredths percent (15.08%) were engaged in farming. Agricultural related occupations employed 11.87% of the former students. Those employed in non-agricultural occupations comprised 73.05%. The military involved 16.61% while only 0.54% were unemployed. Military personnel were not included when employment percentages were calculated.

New Jersey. Graduates of the 1963-64 school year were surveyed by the New Jersey State Department of Education (23). Of the 212 graduates, 16 (7.5%) were in college full-time, 20 (9.4%) were enrolled in other post-secondary education, and 35 (16.5%) were in the military. The remaining 141 were available for employment. Seventy-one percent

(71%) or 100 of those were employed in agriculture. This represented 47.17% of the total number of graduates.

Previous years' data reported for the period of 1958 through 1963 indicate an average of 41.44% of graduates employed in agriculture one year after graduation. The low was 37.94% in 1958 and the high was 46.94% in 1961.

Arizona. Williams (24) reported on former Arizona students who had studied two or more years of vocational agriculture from September, 1953, to June, 1962. The sample consisted of 2925 students of which only 669 responded. Of those who were employed, 30% were in production agriculture, 10.51% were in other agricultural occupations, and 59.49% were in occupations not related to agriculture. Former students who were enrolled in institutions of higher education represented 26.60% of the respondents. Of these, 22.29% were preparing for jobs in production agriculture while 28.57% were preparing for jobs related to production agriculture. Forty-eight percent (48%) were preparing for occupations not related to agriculture.

Temporary positions such as the military, Peace Corps and others accounted for 14.40% of the students contacted.

Nebraska. Nebraska male graduates from 1954 through 1958 were classified by Kahler and Bundy (25). It was found that 37.7% were either farmers or farm managers. Fifteen percent were involved in off-farm agricultural occupations and one percent were farm laborers. Non-agricultural related occupations accounted for the remainder of the graduates.

West Virginia. West Virginia's American Farmers and past state Future Farmers of America officers were analyzed by Wayman (26). The study involved 139 American Farmers and 224 past state F.F.A. officers. Of the American Farmers, 54 were farming full-time and 32 were part-time farmers. Therefore, 61.9% were involved in farming to some degree. Twenty-six or 18.7% were involved in agricultural occupations other than farming and 39 or 28% were employed in non-agricultural occupations. Twelve were college students, four were in the military and four were deceased. One hundred fourteen (114) of 131 American Farmers were living and working in West Virginia.

The past state F.F.A. officers also represented 57 American Farmers. Forty-six or 20.5% were farming full-time or part-time. Off-farm occupations employed 58 or 25.9%. Ninety or 40.2% were in non-agricultural occupations. College students accounted for 18 or eight percent. Military service involved 12 persons, 14 were deceased and one was unknown.

In 1970 69% or 136 of the 198 living past state F.F.A. officers who were not in the military were living and working in West Virginia.

Connecticut. Quesada and Seaver (27) investigated the status of graduates in Connecticut for the years 1961, 1964, 1967, and 1970. Graduates were defined as having completed one or more years of vocational agriculture and were enrolled at the time of graduation. Respondents numbered 253 or 47.5% of a sample of 533.

Employment percentages in related occupations to agriculture increased with each group of graduates from 1961. Nineteen percent were reported in agricultural related occupations for 1961, 35% for

1964, 38% for 1967 and 52% for 1970. Accordingly, percentages reported for non-agricultural related employment declined from 1961. Eighty-one percent of 1961 graduates were reported in non-agricultural related jobs, 65% for 1964, 62% for 1967 and 48% for 1970.

Virginia. In 1979, Hillison (28) analyzed 1974 secondary agricultural education graduates in Virginia. The respondents indicated that 54.9% were employed in non-agricultural occupations. Full-time farming and ranching involved 13.4% of the respondents while part-time farming and ranching employed 24.4%. Other agricultural occupations in which a respondent may be represented in more than one category are agribusiness, horticulture, forestry or natural resources, agricultural mechanics, professional agriculture and self-employment in agriculture.

Alabama. Iverson and Spencer (29) in a 1979 Alabama follow-up found that 43.1% of the respondents were employed in non-agricultural occupations. Full-time farming and ranching involved only 6.4% while part-time farming and ranching involved 11.9%. College students accounted for 13.8%. Self-employment in agriculture and non-agriculture totaled 7.3%. Five and four-tenths percent (5.4%) were unemployed.

Southern Region. Iverson and Brown (30) compiled data from ten states for a southern region follow-up. Findings for the region were as follows: Forty-seven and seven-tenths percent (47.7%) of the respondents were in non-agricultural occupations; 31.8% were farming and/or ranching full-time or part-time; 10.4% were self-employed in agriculture; 9.7% were self-employed in non-agricultural occupations; college attendance occupied 11.7%; and 4.6% were reported unemployed.

Some college student respondents may have referred to themselves as being unemployed.

Local Follow-up Studies

Henslee (31) in a study involving 1946 through 1956 graduates of Erick High School, Erick, Oklahoma, found that 33.5% of the graduates were self-employed, 56.6% were in private employment and 9.9% were public employees. Of the total sample, 30.7% were engaged in farming.

Waits (32) followed up former Buffalo, Oklahoma, high school graduates who completed three or more years of vocational agriculture. Those who graduated from 1955 through 1965 were included in the study. Twelve and one-half percent (12.5%) of the respondents were in production agriculture. Approximately 19% were in college in agricultural related areas. Those in non-agricultural related occupations or attending college in non-agricultural related areas comprised 68.75% of the respondents.

Cannon (33) examined graduates from three schools in Atoka County, Oklahoma. Respondents were limited to those who completed at least two years of vocational agriculture. The graduates were from welfare and non-welfare families. Eighteen percent (18%) of the non-welfare graduates entered an occupation for which they were trained and 14% continued their education in a major related to their training. The corresponding percentages for the welfare group were 12% and 4%, respectively.

In a survey of former students of Phoenix Union High School, Phoenix, Arizona, Langbehn (34) reported on graduates from 1961 through 1965. Only those students who had completed four or more semesters of

vocational agriculture and were not currently a student in the school system were contacted. Only 44 responses of a sample of 55 were received. Four or 9.09% were employed in agriculture or agricultural related occupations. Military service accounted for 10 or 22.72% of the respondents. Twenty-nine or 65.9% were employed in non-agricultural jobs. Only one person was found to be unemployed.

Lamers (35) surveyed farm reared males who graduated from Earlham Community High School, Earlham, Iowa, from 1945 through 1965. He found 49.7% were in non-agricultural occupations and 58.4% were involved in agriculture. Farm operators, managers or laborers comprised 17.2% and off-farm agricultural occupations made up the remaining 31.3% of the agricultural occupations. Unemployed persons amounted to only 1.8%.

Poitevin (36) reported the status of 372 males who graduated from North High School, West Union, Iowa. Graduates from the years 1957 through 1966 were included. Eleven percent or 34 were classified as farmers and two percent or 6 comprised farm labor. Off-farm agricultural occupations included 56 or 18.5%. Non-agricultural occupations contained 191 or 63%. Of the respondents, 31% or 96 were employed in agriculture.

Miehe (37) investigated the occupations of 236 male graduates of Monticello Community High School, Monticello, Iowa. Graduates from 1950 through 1960 who were reared on a farm were included. He found that 20% had entered professional occupations and 55% were farming or in agricultural related occupations. Seventeen percent (17%) were classified in services, 14% were craftsmen, and 11% were in clerical and sales occupations.

A survey conducted by Osmond (38) concerning 1931 through 1961 former F.F.A. officers and members at Grandfield, Oklahoma, showed that 28% were in farming and ranching. Eighty percent were in agricultural related occupations and the remainder, 64%, were in non-agricultural related occupations.

Former Ripley, Oklahoma, vocational agriculture graduates were examined by Mitchell (39). He reported 60.85% of 1951 through 1973 graduates were involved in some type of agriculture or agricultural related job. The remaining 39.15% reported no income from agricultural jobs. Fifty-two percent had attended a post-secondary educational institution.

Students who graduated from high school at Springer, Oklahoma, during the period from 1960 through 1972 were investigated by Montgomery (40). Agricultural related occupations employed 26% of the graduates while 72% were employed in non-agricultural occupations. Fifteen of the respondents reported receiving 100% of their income from agriculture. Approximately 61.5% of those involved in agriculture received more than 50% of their income from their agricultural occupations.

Pennington (41) described 1946 through 1974 state farmer degree recipients and/or state proficiency award winners from Thomas High School, Thomas, Oklahoma. Forty-one and one-half percent (41.5%) were engaged to some degree in production agriculture or agricultural related occupations.

Gilliland (42) reported on graduates from Minco High School, Minco, Oklahoma. Persons who graduated during the years through 1949, 1954 through 1959, and 1964 through 1969 and completed at least

two years of vocational agriculture were included. Forty-two and eight-tenths percent (42.8%) were reported in farming, part-time farming, or an agricultural related occupation. Those employed in jobs other than agriculture totaled 57.2%. Thirty-seven and three-tenths percent (37.3%) indicated they received part of their income from farming.

Factors Related to Occupational Status

Future Farmers of America (F.F.A.) Activities

Edington and Hill (11) reported that the higher the F.F.A. degree held, the greater the chance was of a respondent entering farming or a post high school educational institution, remaining in-state, and being employed.

Respondents in Henslee's study (31) related that F.F.A. activities were the most important school activity beneficial to their present employment. Ninety percent (90%) rated it "essential" or "beneficial."

Eggenberger (13) found that farm operators in his study held the largest percentage of offices, State Farmer and American Farmer degrees. However, persons employed in farm-related occupations indicated they received the most value from F.F.A. leadership training and contests.

Lamers (35) noted the value of Future Farmers of America was greatest for those employed on the farm. In their present occupations, 45% of the respondents rated it "of much value." "Some value" was reported by 31.3% of the respondents.

In the 1970 class reported by Quesada and Seaver (27), 21% indicated that F.F.A. was of no value to them. The remaining classes and

79% of the 1970 class are only indicated as replying "in the affirmative." Ninety percent (90%) were members on a voluntary basis.

Osmond (38) concluded that qualities of leadership desirable for F.F.A. officers are also desirable in other organizations. Student participation in leadership activities will contribute to their decision-making ability and enhance their ability to participate intelligently in discussions. Perhaps the most significant conclusion is that leadership activities help the student to organize his plans for the future.

Mitchell (39) proposes that leadership opportunities should be made available to all vocational agriculture students.

Vocational agriculture training in leadership and public speaking were listed as most beneficial by several respondents reported by Montgomery (40).

Pennington (41) found that State Farmers and proficiency award winners are prone to stay in agriculture. Eighty-eight and seven-tenths percent (88.7%) stated the degree was beneficial in their present employment.

Migration

Eggenberger (13) found that 74.2% of the farm operators were in the same county in which they had attended high school. Twenty-one and seven-tenths percent (21.7%) were outside the county in which they attended high school but within 100 miles of their high school. Only 4.1% were more than 100 miles away.

Those involved in farm-related occupations migrated more. Those remaining in the same county as their high school were 46.6%.

Migrators outside the county but within 100 miles totaled 27.8%. The remainder (25.6%) migrated more than 100 miles.

The respondents who were involved in non-agricultural occupations were reported to be within the county at a rate of 26%. Outside the county but within 100 miles accounted for 29.6%. Forty-four and four-tenths percent (44.4%) migrated more than 100 miles.

Priebe (15) reported 50.8% of the respondents were still in their high school community. Fifteen and eight-tenths percent (15.8%) were living in other communities in South Dakota. Those who left the state accounted for 26.7%. Military service claimed 6.7%.

In Iowa, Robinson (17) documented that 93.84% of those engaged in farming remained in their home community compared to 36.06% of those engaged in non-agricultural occupations.

Kahler and Bundy (25) noted that graduates involved in agricultural occupations tend to remain in their home communities more than those involved in non-agricultural occupations.

Poitevin (36) reported 80% of the farm operators were still in the local school district and the remaining 20% were within a 50-mile radius. Professionals migrated out of Iowa at a rate of 44%. Of the total respondents, 27% were still in the local school district and only 34% had migrated to other states.

Miehe (37) found that none of the farm operators had migrated from the state. Fifty-four percent (54%) of the graduates were within a 30-mile radius, 14% were within a 30- to 60-mile radius and 9% lived beyond 60 miles but within the state of Iowa. Twenty-two percent (22%) of the total respondents had migrated to other states. Professional occupations represented 45% of the migrators.

Pennington (41) noted that 51% of the State Farmers and/or state proficiency award winners were in their home community. Ninety-two percent (92%) were residing in Oklahoma.

Value of Vocational Agriculture

In studies where the value of vocational agriculture was rated, math was the only subject that ranked higher with any consistency.

Henslee (31) reported respondents' ratings of subjects in two categories, i.e., importance in securing employment and importance in their present job. Math ranked first as being "essential" or "important" in both categories. Vocational agriculture ranked fifth in each category.

Eggenberger (13) noted that all occupational groups rated math as being most important in their present occupations. Vocational agriculture was ranked second by farmers, fourth by those in farm-related occupations and ninth by those in non-agricultural related occupations. Farmers related all areas of vocational agriculture higher than the other groups.

Roberts (14) found that respondents felt their employability had been increased in occupations involving knowledges and skills taught in agricultural mechanics.

Iverson and Spencer (29) reported over 90% of the respondents indicating they would take vocational agriculture/agribusiness again if they had the opportunity. Eighty-three percent (83%) agreed that vocational agriculture/agribusiness helped them learn how to work. Immediately after high school, two-thirds of the 1974 graduates from Alabama's vocational agriculture/agribusiness education programs

entered the job market.

Iverson and Brown (30) indicated in the southern region follow-up that over 50% of the 1974 graduates entered the job market immediately. If they had to do it over again, 92.2% responded they would take vocational agriculture/agribusiness again. Eighty-five and one-tenth percent indicated the program helped them learn how to work.

Lamers (35) found that vocational agriculture was rated most valuable by farmers of all the respondents in his study.

Mitchell (39) related that 94.47% of the graduates surveyed felt that training in vocational agriculture was beneficial in their present occupations.

Waits (32) reported that vocational agriculture was ranked more than any subject as being most helpful in preparing for their present occupations.

Montgomery (40) noted that 88% of all graduates surveyed felt vocational agriculture was important.

Gilliland (42) also found that graduates ranked math as being most beneficial to them. Vocational agriculture was ranked second.

Summary

Follow-up of students in vocational education is necessary to provide information for changing or up-dating the curriculum. Vocational agriculture is no exception. Previous studies show much variability and uniqueness to fit specific situations. It is important that the trend of follow-up activities continue to meet the ever-changing demands of vocational agriculture programs.

As related in the literature, different geographical areas have different rates of employment in related occupations to the vocational agriculture program. The five-year follow-up data is lacking for the State of Oklahoma for 1973-74 completers. Also, factors associated with their occupational status needs to be analyzed.

This information when assembled and analyzed will provide a basis for decision making.

Table I summarizes the majority of the state and regional follow-up studies reported in the review of literature.

Table II summarizes the majority of the local follow-up studies reported in the review of literature.

TABLE I
SUMMARY OF STATE AND REGIONAL FOLLOW-UP STUDIES
(REPORTED IN PERCENTAGES)

Study	Farming	Agricultural Related Occupations	Non- Agricultural Related Occupations	Attending College or Technical School	Unem- ployed	Mili- tary	Other/ Unknown
Edington and Hill (11) Oklahoma	18.16	10.90	58.65	12.29*			
Eggenberger (13) West Texas	28.4	15.7	49.5			6.4	
Roberts (14) Arkansas			86	(Entire sample originally entered non-agricultural related occupations)			
Priebe (15) South Dakota	-----	(56.7)-----	36.6				
Magisos (16) Washington	10.78 ^(1,2)	15.75	61.69		0.33		
Robinson (17) Iowa	29.63	13.31	55.13				
New York State Education Dept. (18)	25.6	14.1	14.2	24.1	1.2	17.1	16.4
Rodgers (43) South Carolina	-----	(41.6)-----	(Includes colleges of agriculture) 29.2	-----	(29.2)-----		

TABLE I (Continued)

Study		Farming	Agricultural Related Occupations	Non- Agricultural Related Occupations	Attending College or Technical School	Unem- ployed	Mili- tary	Other/ Unknown
Colorado State Board for Vocational Education (44)	1958	33.5	10.2	27.4	5.3 4.6*	0	16	3
	1963	31.8	8.3	12.2	17.7 19.1*	1.1	8.5	1
Bender (21) Ohio	1965	37 ^(1,2)	12		6 *	7	----(23)----	
	1969	30 ^(1,2)	13		15 *	1.9	----(28)----	
Berkey (19) New York		----- (21.7) -----		19.3	31	1	27	
Berkey (4) New York		----- (19.9) -----		19.1	28	2	31	
Bass (22) Virginia		15.08	11.87	73.05				
New Jersey State Dept. of Education (23)		----- (47.2) -----		19.3	16.9		16.5	
Williams (24) Arizona		17.7	6.2	35	13.1 13.5*		----(14.4)----	
Kahler and Bundy (25) Nebraska		37.7	15	46.3				1
Wayman (26) American Farmers West		38.8 ⁽¹⁾ 23 ⁽²⁾	18.7	28	8.6			2.9
Virginia State F.F.A. Officers		20.5 ^(1,2)	25.9	40.2	8		5.4	6.7

TABLE I (Continued)

Study		Farming	Agricultural Related Occupations	Non- Agricultural Related Occupations	Attending College or Technical School	Unem- ployed	Mili- tary	Other/ Unknown
Quesada and Seaver (27)	1961		19	81				
	1964		35	65				
Connecticut	1967		38	62				
	1970		52	48				
Oklahoma State Dept. of Vocational and Technical Ed. (12)	1973(A)	----- (40.8) -----		10.1	29* 10	2	0	8
	1973(B)	----- (45.5) -----		16.25	15* 7	2		13
Hillison (28)		13.4 ⁽¹⁾						
Virginia		24.4 ⁽²⁾		54.9				
Iverson and Spencer (29) Alabama		6.4 ⁽¹⁾	12	43.1	13.8	5.4		
		11.9 ⁽²⁾						
Iverson and Brown (30)								
Southern Region		31.8 ^(1,2)		47.7	11.7	4.6		

*Colleges or Technical Schools of Agriculture.

¹Full-time farming.

²Part-time farming.

TABLE II
SUMMARY OF LOCAL FOLLOW-UP STUDIES
(REPORTED IN PERCENTAGES)

Study		Farming	Agricultural Related Occupations	Non- Agricultural Related Occupations	Attending College or Technical School	Unem- ployed	Mili- tary	Other/ Unknown
Henslee (31)								
Erick, Oklahoma		30.7	3.3	66				
Waits (32)								
Buffalo, Oklahoma		12.5		(68.75 including non-ag college students)	19*			
Cannon (33) Atoka	Welfare	12	34	4*	10	28		
County, Oklahoma	Non- Welfare	18	22	12 14* 24	6	16		
Langbehn (34)								
Phoenix, Arizona		-----	(9)-----	65.9		2.2	22.7	
Lamers (35)								
Earlham, Iowa		17.2	31.3	49.7		1.8		
Poitevin (36) West								
Union, Iowa		11	18.5	63				2
Miehe (37)								
Monticello, Iowa		-----	(55)-----	42				

TABLE II (Continued)

Study	Farming	Agricultural Related Occupations	Non- Agricultural Related Occupations	Attending College of Technical School	Unem- ployed	Mili- tary	Other/ Unknown
Osmond (38) Grandfield, Oklahoma	28	8	64				
Mitchell (39) Ripley, Oklahoma	----- (68.85) -----		39.15				
Montgomery (40) Springer, Oklahoma	----- (26) -----		72				
Pennington (41) Thomas, Oklahoma	11.3 ⁽¹⁾ 9.4 ⁽²⁾ -- (41.5) -----		15.1	41.5		1.9	15.1
Gilliland (42) Minco, Oklahoma	11.8 ⁽¹⁾ 5.5 ⁽²⁾	25.5	57.2				

*Colleges or Technical Schools of Agriculture.

¹Full-time farming.

²Part-time farming.

CHAPTER III

METHODOLOGY

The purpose of this chapter is to describe the procedures and design used in accomplishing the objectives of the study.

The objectives of the study were:

1. To determine the current status of vocational agriculture "completers" for the selected year with regard to occupation, further education, economic level and other demographic factors.
2. To ascertain the perceived value of the various components of the vocational agriculture program as indicated by the respondents.
3. To secure the perceptions of program completers to recent and proposed changes in the vocational agriculture program.

In order to accomplish the objectives of the study, the following procedures were utilized to collect data. Statistical techniques used to analyze data will be presented and explained.

Identification of Population and Sample

The population for the study consisted of all completers of the vocational agriculture programs in Oklahoma in 1973-74. A program completer was defined as any student who completed three or more years of vocational agriculture or dropped out with possibly less than three years in 1973-74. The programs in which they were enrolled were accredited by the Oklahoma State Department of Vocational and Technical

Education. Program completers reported by their vocational agriculture teachers totaled 3862 in 1973-74.

The completers' names were sent to the Oklahoma State Department of Vocational and Technical Education and programmed into a computer. The computer was programmed to produce a randomly selected sample from those names defined as program completers during 1973-74.

From the population of 3862 completers, a sample size of 350 would yield the desired 95% confidence level. This sample size was determined by a formula reported by Cochran (45, p. 54). The formula is as follows:

$$n = \frac{\frac{t^2 PQ}{D^2}}{1 + \frac{1}{N} \left(\frac{t^2 PQ}{D^2} - 1 \right)}$$

n = sample size

t = 1.96

P = .5

Q = 1-P

D = .05

N = population size

When appropriate values for this study were substituted in the formula, the resulting n equalled 349.486. This number was rounded up to 350. An additional 10% override was added to compensate for unknowns. The total sample of 385 resulted. Students from 274 of the 354 (77%) departments in operation during 1973-74 were represented. The number of students from each department ranged from one to a maximum of five. Only two departments had five members surveyed.

Development of the Instrument

The instrument utilized to collect data for the study was the instrument which evolved from the Southern Regional Study with slight revisions for Oklahoma.

The instrument was pre-tested and revised at Mississippi State University before being sent to the states participating in the regional study. The original instrument was then revised to meet specific needs for Oklahoma. More detail was incorporated into some questions and acronyms specific for some programs in the state were added.

Income brackets were divided into smaller increments to provide a more detailed description of "Present Annual Gross Income." The word "VAOT" was added to the item concerning supervised occupational experience programs. This acronym is specific to Oklahoma. Names and addresses of employers were also requested. The revised instrument included twelve items concerning specific demographic data.

Opinions of completers concerning the vocational agriculture program were surveyed by 26 items which were rated on a five-point Likert scale. The categories were as follows: Strongly Disagree (1); Disagree (2); Undecided (3); Agree (4); and Strongly Agree (5).

Collection of Data

Due to the time lapse since the completers were in school, both high school principals and vocational agriculture teachers were involved in locating the former students.

A packet was mailed to the principals from the Oklahoma State Department of Vocational and Technical Education. Included were a

cover letter, a copy of the questionnaire, sealed and stamped envelopes with former students' names on them, an address sheet and a return envelope for the address sheet.

The cover letter explained the follow-up study and solicited the principals' assistance in providing addresses. They were asked to place the students' most recent address on the envelopes and mail them. The address sheet was to be returned to the State Department of Vocational and Technical Education with the students' addresses written on them. The questionnaire was included for their own information.

The students' envelopes contained a cover letter explaining the follow-up, a copy of the questionnaire and a pre-paid return envelope. Student questionnaires were coded numerically to account for respondents.

Letters were sent to the vocational agriculture teachers and were identical to the principals' letters with the exception of a note typed at the top. It explained that the letter and enclosures were sent to his principal. His assistance was also solicited in helping the principal secure current addresses.

After approximately two weeks, a telephone follow-up was made to principals who had not responded. Some student responses were received from schools where the principal's response had not been received. This indicated that the students' envelopes had been mailed. If return addresses for all students representing a department were received with their responses, no principal follow-up was made.

When all principals had been contacted, 300 former students' addresses had been identified. A second mailing was made to those who

possibly did not receive the original instrument from their principal. It is notable that 55 (14.3%) of 385 former students' addresses were unknown. Twenty-two (5.7%) were returned due to wrong addresses. The remainder of the sample totaled 308. After receiving 121 returns (31.43%) and accounting for unknowns and wrong addresses, 187 non-respondents were identified.

No second mailing was made to the non-respondents because the entire group was to be contacted by telephone. A complete set of current telephone books was obtained for the State of Oklahoma. The directories were searched for names of the non-respondents corresponding to their addresses. This search produced 56 telephone numbers from which only 11 valid responses resulted. Two people refused to talk and the remainder were numbers which were incorrect, disconnected, or not answered.

At the completion of the telephone follow-up, 132 valid responses had been received and non-respondents totaled 176.

Available data was keypunched by the Oklahoma State Department of Vocational and Technical Education and the computer cards were sent to Mississippi State University for processing. The information was incorporated into the Southern Regional Report and computer printouts were returned to Oklahoma.

Frazier and Finley (46) reported a study which analyzed the methodology described in this study. Their methodology investigation pointed to several inadequacies with the procedures utilized to gather data for the Oklahoma contribution to the Southern Regional Study.

The objective of the study was to test a method of obtaining long range follow-up data from former students. The methods used to gather

data for this study produced only 132 useable responses of the 350 necessary for the 95% confidence level. They concluded, therefore, that the data collection procedure was not adequate to obtain desirable results. Bias could not be ascertained because 252 of the sample could not be surveyed. If the bias could not be measured, they questioned the accuracy of the estimations about the population. By maintaining a .05 standard error constant, it was reported that the 132 responses would only yield a .76 confidence level.

They hypothesized that 1324 of a population of 3864 could be found if 132 of 385 had been located. With a constant .05 standard error, the resulting confidence level for the population would only be .78.

The pertinent conclusion was that the data collection procedure does not provide data from which accurate estimates of the population can be made.

Statistical Analysis

Mail responses and telephone responses were combined for statistical analysis. It was noted that the mean responses to seven of the 26 opinion statements differed by only one category. The absolute limits of the categories are as follows:

Strongly Agree	4.5-5.0
Agree	3.5-4.49
Undecided	2.5-3.49
Disagree	1.5-2.49
Strongly Disagree	1.0-1.49

The maximum difference which existed between the two types of responses was .766 and the minimum difference was .405. The mean of

differences for the seven categories was .578.

Descriptive statistics were used to analyze specific demographic data. Values were calculated for the mean, mode, median, standard deviation and frequencies.

The specific demographic data reported were categorized as follows: (1) Age; (2) Sex; (3) Race; (4) Educational Level; (5) Years of High School Courses in Vocational Agriculture; (6) Years of Membership in Future Farmers of America; (7) Highest Degree of F.F.A. Membership; (8) Years in a Supervised Occupational Experience Program; (9) Years in Adult or Young Farmer Classes; (10) Where You Lived Most of Your Life While in High School; (11) Present Annual Gross Income; and (12) Current Occupational Status, which included unemployment and attendance in post-secondary education.

Based upon data received, respondents were assigned to occupational categories. Those respondents who indicated more than one occupational category were assigned to the category which was judged by the researcher to require most of their time. Exceptions were part-time farmers and college students. They were assigned to that category regardless of any other occupations they might have indicated.

The agribusiness, horticulture, forestry/natural resources, agricultural mechanics and professional agricultural employees were combined and classified as agricultural related occupations. This was feasible because of the low number of respondents for these groups.

As a result of this occupational categorization process, the following distribution of respondents was established:

- (1) Non-agricultural Employees (N=58)
- (2) Full-time Farmers (N=11)

- | | |
|------------------------------------|--------|
| (3) Part-time Farmers | (N=28) |
| (4) Agricultural Related Employees | (N=18) |
| (5) Attending College | (N=9) |
| (6) Unemployed | (N=7) |

A single classification analysis of variance was used to analyze the data. When significant F values were found, Duncan's Multiple Range Test was utilized to identify group means which differed significantly from other group means (see Barr et al. [47], pp. 57-65, 108-111).

Values reported on the Likert scale were treated as interval data. Kerlinger (48) stated,

Interval or equal-interval scales possess the characteristics of nominal and ordinal scales, especially the rank order characteristic. Numerically equal distances on interval scales represent equal distances in the property being measured (p. 437).

. . . The best procedure would seem to be to treat ordinal measurements as though they were interval measurements, but to be constantly alert to the possibility of gross inequality of intervals (p. 441).

Popham (49) proposed that,

Analysis of variance, in its most basic form, is nothing more than a clever statistical method of testing for significant differences between means of two or more groups. . . . When a researcher uses the analysis of variance statistical model he is primarily interested in mean differences rather than variance differences (pp. 164-165).

. . . It must be pointed out that if the null hypothesis has been shown to be untenable, that is, the existence of significant mean differences between two or more groups has been demonstrated, the researcher is not yet able to determine with accuracy which means are different from which other means. Fortunately, methods for carrying out further analysis to determine the exact location of mean differences has been developed. Two commonly used techniques of this type are those described by Tukey and Duncan (p. 172).

CHAPTER IV

ANALYSIS AND PRESENTATION OF DATA

The purpose of this chapter is to report and analyze the data collected using the procedures described in the preceding chapter.

Demographic Data

Of the 132 respondents participating in this study, the average age was 22.49 years. The range involved people reporting their ages from 16 to 38 years. One respondent failed to indicate his age in years and therefore was not included in calculating the mean. Table III illustrates the respondents by age in years.

The respondents were primarily white males, as indicated by Table IV. It is notable that no Blacks were represented in the sample.

Educational level was indicated in years according to the highest grade completed. College years were indicated as being 13, 14, 15, 16, or 17. Table V indicates that 47.4% had completed one or more years of college. Nineteen and seven-tenths percent (19.7%) related that they had completed four or more years of college. The average number of years of education completed was 13.23.

Table VI points out the number of years of high school vocational agriculture completed by those surveyed. Excluding the two "other" responses, the average number of years of vocational agriculture completed in high school was 3.46 years. Completion of three or more

TABLE III
DISTRIBUTION OF RESPONDENTS BY AGE

Years	Frequency (N=132)	Percentage
16	1	.8
21	5	3.8
22	71	53.8
23	47	35.6
24	5	3.8
25	1	.8
38	1	.8
Unknown	1	.8

TABLE IV
CHARACTERISTICS OF RESPONDENTS BY RACE AND SEX

Race	Male (N=127)		Female (N=4)		Unknown Sex (N=1)	
	No.	%	No.	%	No.	%
White	121	91.7	4	3.0	1	.8
Spanish surname	1	.8				
Other	2	1.5				
Unknown	3	2.3				

TABLE V
YEARS OF EDUCATION COMPLETED BY RESPONDENTS

Years	Frequency (N=132)	Percentage
10	1	.8
11	1	.8
12	68	51.5
13	16	12.1
14	14	10.6
15	4	3.0
16	23	17.4
17	3	2.3
Not reported	2	1.5

TABLE VI
YEARS OF VOCATIONAL AGRICULTURE COMPLETED
BY RESPONDENTS

Number of Years	Frequency (N=132)	Percentage
One	9	6.8
Two	13	9.8
Three	17	12.9
Four	91	68.9
Other	2	1.5

years of vocational agriculture was indicated by 83.34% of those surveyed.

The number of years of membership in the Future Farmers of America (F.F.A.) completed by the respondents is represented in Table VII. Eighty-three and four-tenths percent (83.4%) indicated that they participated three or more years in the F.F.A. The average number of years of participation was 3.74 excluding the four responses which indicated "less than one year" or "other." Two survey instruments were not marked for this item.

TABLE VII
RESPONDENTS' YEARS OF F.F.A. MEMBERSHIP

Years	Frequency (N=132)	Percentage
Less than one year	1	.8
One year	9	6.8
Two years	10	7.5
Three years	19	14.4
Four years	88	66.7
Other	3	2.3
No response	2	1.5

The highest degree of F.F.A. membership attained by those who cooperated in the study is represented in Table VIII. More than 43% reported they earned only the Greenhand degree or no degree. The remainder achieved at least the Chapter Farmer degree. The Chapter Farmer degree represented 38.6% of those responding and was held by respondents more than any other degree.

TABLE VIII
HIGHEST F.F.A. DEGREE ATTAINED BY RESPONDENTS

Degree	Frequency (N=132)	Percentage
Greenhand	37	28.0
Chapter Farmer	51	38.6
State Farmer	22	16.7
American Farmer	1	.8
None	20	15.1
No response	1	.8

The number of years of involvement in supervised occupational experience programs is shown in Table IX. Fifty respondents (37.9%) indicated they were involved in a supervised occupational experience program for four years. Thirty and three-tenths percent (30.3%) of

the respondents were engaged from one to three years. Seventeen (12.8%) provided no response and 16.7% indicated less than one year's involvement.

TABLE IX
YEARS OF INVOLVEMENT IN SUPERVISED
OCCUPATIONAL EXPERIENCE PROGRAMS

Years	Frequency (N=132)	Percentage
Less than one year	22	16.7
One year	12	9.1
Two years	16	12.1
Three years	12	9.1
Four years	50	37.9
Other	3	2.3
No response	17	12.8

Table X illustrates the years of participation in adult or young farmer classes. Of those who responded to this item, 64.4% had been involved to some degree. Thirty-five and six-tenths percent (35.6%) did not respond. One to four years' participation was indicated by 21 (15.9%) of the completers.

TABLE X
YEARS OF PARTICIPATION OF ADULT/YOUNG
FARMER CLASSES

Years	Frequency (N=132)	Percentage
Less than one year	62	47.0
One year	8	6.1
Two years	6	4.5
Three years	1	.8
Four years	6	4.5
Other	2	1.5
No response	47	35.6

More than half of the participants lived on a farm while they were attending high school. Only 5.3% of those who indicated their place of residence while in high school was in a city. Table XI illustrates the type of residence of the respondents while in high school.

Present annual gross income before taxes was reported in increments of \$5000. The category of \$10,000-\$14,499 was reported more than any other. Thirty-four and one-tenth percent (34.1%) indicated they were in that income range. Ranking second was the income range of \$5000-\$9999. Table XII provides an overview of gross incomes reported by respondents. Only four people failed to report their income. Two persons indicated they received gross incomes in excess of \$35,000.

TABLE XI
HIGH SCHOOL RESIDENCE REPORTED BY RESPONDENTS

Type of Residence	Frequency (N=132)	Percentage
On a farm	68	51.5
Rural, non-farm	18	13.6
Small town	36	27.3
City	7	5.3
No response	3	2.3

TABLE XII
ANNUAL GROSS INCOME REPORTED BY RESPONDENTS

Income Level	Frequency (N=132)	Percentage
Less than \$5000	5	3.8
\$5000-\$9999	36	27.3
\$10,000-\$14,999	45	34.1
\$15,000-\$19,999	26	19.7
\$20,000-\$24,999	11	8.3
\$25,000-\$29,999	2	1.5
\$30,000-\$34,999	1	.8
Over \$35,000	2	1.5
No response	4	3.0

The current occupational status of those participating in the study is reported in Table XIII. Eleven persons indicated that they were full-time farmers or ranchers. They represented 8.3% of the respondents. Part-time farming or ranching was indicated by 28 (21.2%). The occupational category encompassing the largest number of the participants was non-agricultural occupations which accounted for 44.3%. Fifty-seven (43.5%) were involved in agriculture full-time or part-time.

TABLE XIII
CURRENT OCCUPATIONAL STATUS INDICATED
BY RESPONDENTS

Occupation	Frequency (N=131)	Percentage
Full-time farmer or rancher	11	8.4
Part-time farmer or rancher	28	21.4
Agricultural related employee	18	13.7
Non-agricultural occupation	58	44.3
Currently attending college	9	6.9
Currently unemployed	7	5.3

Respondents' Ratings of Statements Relating
to Their Vocational Agriculture and
F.F.A. Programs

The ratings of respondents of certain statements pertaining to their vocational agriculture and F.F.A. programs were secured by means of a five-point Likert scale. The categories and their absolute limits follow:

Strongly Disagree	1.0-1.49
Disagree	1.5-2.49
Undecided	2.5-3.49
Agree	3.5-4.49
Strongly Agree	4.5-5.00

Table XIV describes ratings of statements about experiences respondents encountered in vocational agriculture and F.F.A. The highest rated statement, represented by a mean value of 4.695, was that if the respondents had it to do over, they would enroll in the program again. Those who agreed and strongly agreed composed 95.46% of the participants in the study. The second highest rated statement was that the experiences were good for them. This was indicated by a mean value of 4.511.

Of the 14 statements utilized to obtain opinions about experiences obtained in vocational agriculture and F.F.A., eight (57%) positive statements were in the "agree" or "strongly agree" categories. The remainder were in the "undecided" category with the exception of one negative statement. The statement that the experiences were of no benefit to the respondents was rated "strongly disagree" by the

TABLE XIV

RESPONDENTS' RATINGS OF STATEMENTS RELATED TO THEIR
VOCATIONAL AGRICULTURE AND F.F.A. EXPERIENCES

Statements About Vocational Agriculture/ Agribusiness-F.F.A. Experiences	Strongly Disagree	Disagree	Unde- cided	Agree	Strongly Agree	Mean
Were such that if I had it to do over I would enroll in Vocational Agriculture/Agribusiness-F.F.A. again	2 (1.5%)	1 (0.8%)	3 (2.3%)	23 (17.6%)	102 (77.8%)	4.69
Were good for me	1 (0.8%)	3 (2.3%)	2 (1.5%)	47 (35.9%)	78 (59.5%)	4.51
Taught me skills useful in an agricultural career	0	4 (3.0%)	5 (3.8%)	66 (50.4%)	56 (42.7%)	4.33
Helped me learn how to get along with other people	0	8 (6.1%)	14 (10.7%)	61 (46.6%)	48 (36.6%)	4.14
Helped me learn how to work	1 (0.8%)	8 (6.0%)	12 (9.2%)	63 (48.1%)	47 (35.9%)	4.12
Helped me develop leadership skills	1 (0.8%)	5 (3.8%)	18 (13.7%)	64 (48.9%)	43 (32.8%)	4.09
Helped me learn how to participate in meetings	2 (1.5%)	7 (5.3%)	10 (7.6%)	74 (56.5%)	38 (29.0%)	4.06
Taught me skills useful in a non-agricultural career	4 (3.0%)	12 (9.1%)	16 (12.1%)	70 (53.0%)	30 (22.7%)	3.83
Helped me to stay in school	12 (9.1%)	26 (19.9%)	24 (18.3%)	42 (32.0%)	27 (20.6%)	3.35
Encouraged me to go to college	8 (6.1%)	37 (28.2%)	28 (21.4%)	34 (26.0%)	24 (18.3%)	3.22

TABLE XIV (Continued)

Statements About Vocational Agriculture/ Agribusiness-F.F.A. Experiences	Strongly Disagree	Disagree	Unde- cided	Agree	Strongly Agree	Mean
Helped me to choose an occupation	4 (3.0%)	38 (28.8%)	39 (29.6%)	33 (25.0%)	18 (13.6%)	3.17
Helped me to enter and advance in an agricultural occupation	7 (5.4%)	39 (30.0%)	39 (30.0%)	32 (24.6%)	13 (10.0%)	3.04
Helped me to enter and advance in a non-agricultural career	7 (5.5%)	34 (26.8%)	45 (35.4%)	33 (26.0%)	8 (6.3%)	3.01
Were of no benefit to me	87 (68.5%)	34 (26.8%)	2 (1.5%)	1 (0.8%)	3 (2.4%)	1.42

majority (68.5%). The mean reported for this item was 1.417.

Concerning activities of the vocational agriculture teachers only two items were rated "agree" or "strongly agree" by slightly more than 50% of the respondents. The statement that the teacher encouraged the respondent to major in agriculture in college was indicated only in 30% of the responses. Table XV portrays the ratings of the three items.

Respondents indicated that 96.2% were in agreement or strong agreement that instruction in vocational agriculture should include, along with other instruction, supervised occupational experience in agriculture. The mean rating for this item was 4.48. Lab instruction was indicated as being important by 96.2% of the respondents. A mean rating of 4.455 was observed for this item.

F.F.A. activities were indicated as being important by 95.4% and had a mean rating of 4.39. It is notable that all items concerning program activities were rated as being important by 84.85% or more of the respondents with one exception. Respondents disagreed with the statement that only farming should be emphasized in instruction. This was indicated by 81.8%. Table XVI illustrates the responses to the statements and their mean values.

Mean responses to opinion statements concerning experiences in the vocational agriculture/agribusiness and F.F.A. programs are reported by occupational group in Table XVII.

The statement indicating that they would enroll again if they had it to do over was ranked highest by four groups. Full-time farmers gave their highest rating to the statement that they had been taught skills useful in an agricultural career. Part-time farmers indicated that the experiences they had in vocational agriculture were good for

TABLE XV
RESPONDENTS' RATINGS OF STATEMENTS RELATED TO THEIR VOCATIONAL
AGRICULTURE/AGRIBUSINESS-F.F.A. TEACHERS

Statements About Vocational Agriculture/ Agribusiness-F.F.A. Teachers	Strongly Disagree	Disagree	Unde- cided	Agree	Strongly Agree	Mean
Encouraged me to enter an occupation in agriculture	4 (3.1%)	32 (24.8%)	27 (20.9%)	50 (38.8%)	16 (12.4%)	3.33
Provided me with information on careers outside of agriculture	7 (5.4%)	24 (18.6%)	33 (25.6%)	55 (42.6%)	10 (7.8%)	3.29
Encouraged me to major in agriculture in college	6 (4.6%)	41 (31.5%)	44 (33.9%)	29 (22.3%)	10 (7.7%)	2.97

TABLE XVI

RESPONDENTS' RATINGS OF STATEMENTS RELATED TO THEIR VOCATIONAL
AGRICULTURE/AGRIBUSINESS-F.F.A. PROGRAM ACTIVITIES

Statements About Activities of Vocational Agriculture/Agribusiness-F.F.A. Programs	Strongly Disagree	Disagree	Unde- cided	Agree	Strongly Agree	Mean
Should include along with other instruction, supervised occupational experience in agriculture (work experience) for students	0	0	5 (3.8%)	59 (44.7%)	68 (51.5%)	4.48
Should include along with other instruction, laboratory instruction (shop, greenhouse, forestry, plots)	0	1 (0.8%)	4 (3.0%)	61 (46.2%)	66 (50.0%)	4.46
Should include along with other instruction, F.F.A. activities	0	1 (0.8%)	5 (3.8%)	67 (51.1%)	58 (44.3%)	4.39
Should have teachers available year-round (including the summer) to help farmers and other agricultural employees, vocational agriculture/agribusiness students and F.F.A. members with problems associated with agriculture	1 (0.8%)	1 (0.8%)	14 (10.6%)	47 (35.6%)	69 (52.3%)	4.38
Is useful to farmers in the community	1 (0.8%)	1 (0.8%)	6 (4.6%)	73 (55.7%)	50 (38.2%)	4.30
Should include, along with other instruction, agriculture/agribusiness instruction for adults with career interests in agriculture	0	0	20 (15.2%)	59 (44.7%)	53 (40.1%)	4.25
Is useful to agribusiness persons in the community	0	3 (2.3%)	15 (11.6%)	70 (54.3%)	41 (31.8%)	4.16
Should emphasize farming and agribusiness in its instruction	1 (0.8%)	5 (3.8%)	11 (8.3%)	85 (64.4%)	30 (22.7%)	4.05
Should emphasize only farming in its instruction	32 (24.2%)	76 (57.6%)	14 (10.6%)	6 (4.6%)	4 (3.0%)	2.05

TABLE XVII

MEAN RESPONSES BY OCCUPATIONAL GROUPS TO STATEMENTS RELATED TO THEIR
VOCATIONAL AGRICULTURE/AGRIBUSINESS-F.F.A. EXPERIENCES

Statements About Vocational Agriculture/ Agribusiness-F.F.A. Experiences	Full- time Farmers	Part- time Farmers	Agricultural Related Employees	Non-Agri- cultural Occupation	Attend- ing College	Unem- ployed
Were such that if I had it to do over I would enroll in Vocational Agricul- ture/Agribusiness-F.F.A. again	4.36	4.64	4.82	4.79	4.56	4.57
Were good for me	4.64	4.70	4.44	4.55	4.11	4.00
Taught me skills useful in an agricul- tural career	4.73	4.46	4.11	4.30	4.33	4.00
Helped me learn how to get along with other people	4.00	4.11	4.50	4.05	4.33	4.14
Helped me learn how to work	4.64	4.04	4.11	4.11	4.11	3.86
Helped me develop leadership skills	4.09	4.11	4.17	4.12	4.11	3.86
Helped me learn how to participate in meetings	3.91	4.07	3.94	4.26	3.67	3.71
Taught me skills useful in a non-agricultural career	4.18	3.61	3.72	3.93	3.89	3.43
Helped me to stay in school	3.45	3.21	3.44	3.32	3.56	3.71
Encouraged me to go to college	3.55	3.18	3.35	3.10	3.89	3.86
Helped me to choose an occupation	3.73	3.18	3.50	2.93	4.00	2.57
Helped me to enter and advance in an agricultural occupation	4.00	3.14	3.50	2.68	3.22	2.71
Helped me to enter and advance in a non-agricultural career	2.70	2.64	3.13	3.14	3.44	2.83
Were of no benefit to me	1.30	1.19	1.35	1.53	1.44	1.50

them and ranked that statement as number one.

All occupational groups disagreed or strongly disagreed with the statement that their experiences in vocational agriculture, agribusiness and F.F.A. programs were of no benefit to them.

Table XVIII reports the mean responses of the occupational groups to statements about their vocational agriculture teachers. The agricultural related employees rated the statement that their teacher encouraged them to enter an agricultural occupation higher than the other groups. Unemployed people rated highest the statement that their teacher provided them with information on non-agricultural careers. Respondents attending college indicated more than the other groups that their teacher encouraged them to major in agriculture in college.

The lowest ratings of two statements were indicated by the unemployed people. Those were the items concerning encouragement to enter an agricultural occupation and to major in agriculture in college. Part-time farmers expressed the lowest ranking of the statement that the teacher provided them with non-agricultural career information.

Occupational group mean responses are illustrated in Table XIX pertaining to statements about the vocational agriculture/agribusiness-F.F.A. programs. All occupational groups rated all statements in the agree and strongly agree limits with one exception. They all disagreed with the statement that only farming should be emphasized in vocational agriculture instruction.

Table XX summarizes the results from an analysis of variance of opinion statements among occupational groups.

Two statements concerning respondents' experiences in vocational agriculture/agribusiness and F.F.A. possessed F values which indicated

TABLE XVIII

MEAN RESPONSES BY OCCUPATIONAL GROUPS TO STATEMENTS RELATED TO
THEIR VOCATIONAL AGRICULTURE/AGRIBUSINESS-F.F.A. TEACHERS

Statements About Vocational Agriculture/ Agribusiness-F.F.A. Teachers	Full- time Farmers	Part- time Farmers	Agricultural Related Employees	Non-Agri- cultural Occupation	Attend- ing College	Unem- ployed
Encouraged me to enter an occupation in agriculture	3.54	3.25	3.83	3.20	3.63	2.86
Provided me with information on careers outside of agriculture	3.27	3.07	3.41	3.30	3.38	3.86
Encouraged me to major in agriculture in college	2.82	2.75	3.11	3.05	3.33	2.71

TABLE XIX

MEAN RESPONSES BY OCCUPATIONAL GROUPS TO STATEMENTS RELATED TO
THEIR VOCATIONAL AGRICULTURE/AGRIBUSINESS-F.F.A. PROGRAMS

Statements About Activities of Vocational Agriculture/Agri- business-F.F.A. Programs	Full- time Farmers	Part- time Farmers	Agricultural Related Employees	Non-Agri- cultural Occupation	Attend- ing College	Unem- ployed
Should include along with other instruc- tion, supervised occupational experi- ence in agriculture (work experience) for students	4.73	4.39	4.28	4.53	4.67	4.29
Should include along with other instruc- tion, laboratory instruction (shop, greenhouse, forestry, plots)	4.36	4.39	4.56	4.50	4.78	3.86
Should include along with other instruc- tion, F.F.A. activities	4.45	4.39	4.44	4.40	4.50	4.14
Should have teachers available year-round (including the summer) to help farmers and other agricultural employees, voca- tional agriculture/agribusiness students and F.F.A. members with problems associated with agriculture	4.36	4.29	4.56	4.47	4.22	4.00
Is useful to farmers in the community	4.45	4.21	4.28	4.34	4.33	4.00
Should include, along with other instruc- tion, agriculture/agribusiness instruc- tion for adults with career interests in agriculture	4.00	4.36	4.11	4.33	4.44	3.86
Is useful to agribusiness persons in the community	4.36	4.26	4.06	4.14	4.22	3.71
Should emphasize farming and agribusi- ness in its instruction	4.36	4.11	4.06	3.98	4.11	3.70
Should emphasize only farming in its instruction	2.91	2.14	2.00	1.86	2.33	1.71

TABLE XX

ANALYSIS OF VARIANCE OF OPINION ITEMS AMONG OCCUPATIONAL GROUPS

Opinion Item	Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Value	Significance Level
<u>My Experiences in Vocational Agriculture/Agribusiness-F.F.A.:</u>						
Were such that if I had it to do over I would enroll in Vocational Agriculture/Agribusiness-F.F.A. again	Among Groups	5	2.4016	.4803	.98	.4348
	Within Groups	124	60.8984	.4911		
Were good for me	Among Groups	5	4.6160	.9232	1.85	.1068
	Within Groups	124	61.8532	.4988		
Taught me skills useful in an agricultural career	Among Groups	5	3.9232	.7846	1.65	.1498
	Within Groups	124	58.8537	.4746		
Helped me learn how to get along with other people	Among Groups	5	3.3453	.6691	.95	.4492
	Within Groups	124	86.8778	.7006		
Helped me learn how work	Among Groups	5	3.6288	.7258	.95	.4503
	Within Groups	124	94.4020	.7613		
Helped me develop leadership skills	Among Groups	5	.5183	.1037	.15	.9766
	Within Groups	124	87.9740	.6772		
Helped me learn how to participate in meetings	Among Groups	5	5.0389	1.0078	1.48	.1986
	Within Groups	124	84.1919	.6790		
Taught me skills useful in a non-agricultural career	Among Groups	5	4.7085	.9417	.98	.4343
	Within Groups	125	120.2534	.9620		
Helped me to stay in school	Among Groups	5	2.1551	.4310	.26	.9319
	Within Groups	124	203.8526	1.6440		

TABLE XX (Continued)

Opinion Item	Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Value	Significance Level
<u>My Experiences in Vocational Agriculture/</u> <u>Agribusiness-F.F.A.:</u>						
Encouraged me to go to college	Among Groups	5	7.2348	1.4470	.98	.4361
	Within Groups	124	183.8421	1.4826		
Helped me to choose an occupation	Among Groups	5	17.3757	3.4751	3.19	.0097*
	Within Groups	125	136.2274	1.0898		
Helped me to enter and advance in an agricultural occupation	Among Groups	5	22.5939	4.5188	4.37	.0012*
	Within Groups	123	127.1270	1.0336		
Helped me to enter and advance in a non-agricultural career	Among Groups	5	7.7860	1.5572	1.58	.1695
	Within Groups	120	118.2140	.9851		
Were of no benefit to me	Among Groups	5	2.3656	.4731	.77	.5785
	Within Groups	120	74.1741	.6181		
<u>My Teacher(s) in Vocational Agriculture/</u> <u>Agribusiness-F.F.A.:</u>						
Encouraged me to enter an occupation in agriculture	Among Groups	5	8.5060	1.7012	1.50	.1926
	Within Groups	122	138.0487	1.1315		
Provided me with information on careers outside of agriculture	Among Groups	5	3.9002	.7800	.73	.6064
	Within Groups	122	130.8186	1.0722		
Encouraged me to major in agriculture in college	Among Groups	5	3.9982	.7996	.76	.5804
	Within Groups	123	128.9320	1.0482		

TABLE XX (Continued)

Opinion Item	Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Value	Significance Level
<u>In My Opinion the Vocational Agriculture/Agribusiness-F.F.A. Program:</u>						
Should include along with other instruction, supervised occupational experience in agriculture (work experience) for students	Among Groups	5	2.3712	.4742	1.47	.2033
	Within Groups	125	40.3311	.3226		
Should include along with other instruction, laboratory instruction (shop, greenhouse, forestry, plots)	Among Groups	5	3.9379	.7876	2.31	.0474*
	Within Groups	125	42.5812	.3406		
Should include along with other instruction, F.F.A. activities	Among Groups	5	.6133	.1227	.34	.8873
	Within Groups	124	44.5867	.3596		
Should have teachers available year-round (including the summer) to help farmers and other agricultural employees, vocational agriculture/agribusiness students and F.F.A. members with problems associated with agriculture	Among Groups	5	2.4543	.4909	.84	.5226
	Within Groups	125	72.6908	.5815		
Is useful to farmers in the community	Among Groups	5	1.1439	.2288	.51	.7740
	Within Groups	124	56.1561	.4529		
Should include, along with other instruction, agriculture/agribusiness instruction for adults with career interests in agriculture	Among Groups	5	3.1140	.6228	1.30	.269
	Within Groups	125	60.0616	.4805		

TABLE XX (Continued)

Opinion Item	Source of Variation	Degrees of Freedom	Sum of Squares	Mean Square	F Value	Significance Level
<u>In My Opinion the Vocational Agriculture/</u> <u>Agribusiness-F.F.A. Program:</u>						
Is useful to agribusiness persons in the community	Among Groups	5	2.3262	.4652	.91	.4799
	Within Groups	122	62.5488	.5127		
Should emphasize farming and agri- business in its instruction	Among Groups	5	2.2565	.4513	.84	.5281
	Within Groups	125	67.4687	.5397		
Should emphasize only farming in its instruction	Among Groups	5	11.9632	2.3926	3.23	.0090*
	Within Groups	125	92.6628	.7413		

*Probability < .05

statistically significant differences at the .05 significance level.

The statement that the respondents' experiences help them to choose an occupation was significant at the .0097 level. A significance level of .0012 was observed for the statement concerning respondents' experiences had helped them to enter and advance in an agricultural occupation.

Two statements about the respondents' vocational agriculture/agribusiness-F.F.A. programs possessed F values that were statistically significant at the .05 level of significance. A significance level of .0474 was observed for the statement that the vocational agriculture/agribusiness-F.F.A. program should include along with other instruction, laboratory instruction. Concerning the statement that only farming should be emphasized in instruction a corresponding significance level .009 was indicated.

Duncan's Multiple Range Test was utilized to identify specific differences among occupational groups.

It was found that full-time farmers and college students differed significantly at the .05 level from non-agricultural employees and those who were unemployed. They differed in their opinions about the statement that their experiences in their vocational agriculture/agribusiness-F.F.A. program helped them to choose an occupation. Full-time farmers and college students indicated the highest group means for this item, 3.73 and 4.0, respectively. Non-agricultural employees and unemployed persons indicated the lowest group means, 2.93 and 2.57, respectively.

Full-time farmers' opinions differed significantly from non-agricultural employees' opinions at the .05 level of significance

concerning the statement that their experiences in the vocational agriculture/agribusiness-F.F.A. programs helped them to enter and advance in an agricultural occupation. The corresponding group mean for full-time farmers was 4.0 compared to a group mean of 2.68 for non-agricultural employees.

Unemployed persons' opinions differed significantly at the .05 level from those of college students, non-agricultural employees, part-time farmers and agricultural related employees relating to the statement that laboratory instruction should be included in the vocational agriculture/agribusiness-F.F.A. program.

College students indicated the highest group mean of 4.78. Agricultural related employees ranked second with a group mean of 4.56. Third was non-agricultural employees with a group mean of 4.5. Part-time farmers ranked fourth with a group mean of 4.39. Unemployed persons represented the lowest group mean with 3.86. It should be noted that all group means fall in the agree or strongly agree categories.

Full-time farmers differed significantly from part-time farmers, agricultural related employees, non-agricultural employees and unemployed persons at the .05 level of significance concerning the statement that only farming should be emphasized in instruction in the vocational agriculture/agribusiness-F.F.A. program.

Full-time farmers responded with the highest group mean of 2.91. They were followed by part-time farmers with a group mean of 2.14, agricultural related employees with a group mean of 2.0, non-agricultural employees with a group mean of 1.86 and unemployed persons with a group mean of 1.71.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this chapter is to present a summary of the purpose of the study, specific objectives, design of the study and major findings. Conclusions and recommendations based on observations and data analysis are presented.

Summary

Purpose of the Study

The purpose of this study was to ascertain the occupational status of 1973-74 Oklahoma vocational agriculture completers as well as their opinions concerning certain aspects of their vocational agriculture program.

Objectives of the Study

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

1. To determine the current status of vocational agriculture "completers" for the selected year with regard to occupation, further education, economic level and other demographic factors.
2. To ascertain the perceived value of the various components of the vocational agriculture program as indicated by the respondents.

3. To secure the perceptions of program completers to recent and proposed changes in the vocational agriculture program.

Design of the Study

The design of the study was pre-determined by the Southern Research Conference in Agricultural Education. Modifications were made to strengthen the methodology and conform to state needs.

The data gathering instrument was modified to provide more detail in respect to supervised occupational experience programs and income levels. Space was provided to list employers and addresses. Opinion ratings were secured by a five-point Likert scale.

Instead of random sampling departments, a random sample of individuals was determined from names in a computer bank. The sample was computed to provide a 95% confidence level.

Questionnaires were mailed to principals in the former students' schools. The principals and vocational agriculture teachers were asked to cooperate in mailing envelopes to the students and return the students' addresses to the Oklahoma State Department of Vocational and Technical Education. All principals were contacted by telephone from whom no response was received. All students from whom no response was received were contacted by telephone, if possible.

Descriptive statistics, single classification analysis of variance and Duncan's Multiple Range Test were utilized to analyze the data collected.

Major Findings of the Research

1. Eighty-nine and four-tenths percent (89.4%) of the respondents

were 22 or 23 years of age. Two questionable ages of 16 and 38 were also reported.

2. White males composed 97.7% of the respondents. The remainder was represented by three percent (3%) white females, eight-tenths percent (.8%) Spanish surname male, one and one-half percent (1.5%) "other" males and the unknowns.

3. Ninety-seven percent (97%) of the participants completed 12 years of school. Four years of college were completed by 19.7%.

4. Four or more years of vocational agriculture were completed by 70.4% of the respondents.

5. Three or more years of F.F.A. membership were experienced by 83.4% of the respondents. Those who agreed or strongly agreed that F.F.A. should be included in the vocational agriculture/agribusiness program comprised 95.4% of the respondents.

6. Fifty-six and one-tenth percent (56.1%) of the participants earned at least the Chapter Farmer degree.

7. Four years of involvement in a supervised occupational experience program were experienced by 37.9% of the respondents. Thirty and three-tenths percent (30.3%) were involved from one to three years. Ninety-six and two-tenths percent (96.2%) either agreed or strongly agreed that supervised occupational experience programs should be included in the vocational agriculture/agribusiness program.

8. Sixty-four and four-tenths percent (64.4%) of the participants indicated involvement to some degree in adult or young farmer classes. One to four years' participation was indicated by 15.9%.

9. Respondents' residences while in high school were farms for 51.5%. Rural, non-farm residences accounted for 13.6%.

10. The majority of respondents' incomes fell within the \$5000-\$19,999 range with 34.1% in the \$10,000-\$14,999 range.

11. Forty-four and three-tenths percent (44.3%) of the respondents were engaged in non-agricultural occupations while 43.5% were involved to some degree in agricultural occupations. Unemployment represented 5.3%.

12. The majority of respondents agreed or strongly agreed with the positive opinion items and disagreed or strongly disagreed with the negative opinion items.

13. The most highly rated opinion statement was that the respondents would enroll in vocational agriculture and F.F.A. again if they had it to do over. Ninety-five and four-tenths percent (95.4%) either agreed or strongly agreed.

14. The lowest rated opinion statement was that the vocational agriculture program was of no benefit to the respondents. Ninety-five and three-tenths percent (95.3%) disagreed or strongly disagreed with this statement.

15. Teachers encouraged the majority of the participants to enter an occupation in agriculture as indicated by 51.2%.

16. Ninety-six and two-tenths percent of the respondents agreed or strongly agreed that laboratory instruction should be included.

17. Program usefulness to farmers in the community was agreed upon by 93.9% of the participants.

18. Responses of full-time farmers and college students were statistically significantly different at the .05 level from non-agricultural employees and unemployed persons on one opinion statement. Full-time farmers and unemployed persons indicated a significantly more

positive response to the statement that their vocational agriculture/agribusiness-F.F.A. experiences helped them to choose an occupation.

19. A statistically significant difference was found at the .05 level between full-time farmers' responses and those of non-agricultural employees concerning the statement about their vocational agriculture/agribusiness-F.F.A. experiences helped them to enter and advance in an agricultural occupation. Full-time farmers showed a significantly greater positive response.

20. Statistically, responses of unemployed persons were significantly different at the .05 level from college students, non-agricultural employees, part-time farmers and agricultural related employees concerning the statement that laboratory instruction should be included in the vocational agriculture/agribusiness-F.F.A. program. Unemployed showed a significantly lower mean rating than the other occupational groups.

21. A statistically significant difference was found at the .05 level between full-time farmers and part-time farmers, agricultural related employees, non-agricultural employees and unemployed persons. The difference was in responses to the statement that only farming should be emphasized in instruction in the vocational agriculture/agribusiness-F.F.A. program. Full-time farmers responded significantly more positive than the other occupational groups.

Conclusions

The following conclusions are made from the analysis of data, findings of the study and observations made by the researcher.

1. Based upon the positive ratings of the statements on the questionnaire, Oklahoma vocational agriculture completers are generally satisfied with their vocational agriculture programs.

2. F.F.A. activities are important to vocational agriculture programs based upon the positive ratings received in this area.

3. It appears that supervised occupational experience programs are an important part of vocational agriculture programs as indicated by over 90% of the respondents.

4. Adult and young farmer classes are not being utilized extensively. If non-respondents to this item are assumed to have had little or no involvement, then more than 80% of the completers have less than one year's involvement or no involvement in adult activities.

5. Over four-fifths of the completers indicated that vocational agriculture teachers are needed the year round. It appears that teachers need to maintain a twelve-month program to assist clientele with problems.

6. Nearly all completers agreed that laboratory instruction is needed in a vocational agriculture program which indicates that laboratory instruction is an integral part of the vocational agriculture program.

7. The vocational agriculture program is useful to all clientele in the community. Two statements indicated agreement in excess of 85%.

8. Agribusiness should be emphasized in the instructional program of vocational agriculture for adults based on positive responses of four-fifths of the completers.

9. Vocational agriculture and F.F.A. activities prepare students for the world of work as indicated by over 80% of the completers.

10. Leadership development is enhanced by experiences in vocational agriculture and F.F.A. activities as indicated by four-fifths of the respondents.

11. Follow-up activities are more pertinent for decision making at the local level and can be carried out more easily there. In order that they could be combined into state or regional follow-up reports, they must be conducted consistently with each other as revealed in the literature cited.

12. The specific methodology utilized in this study should not be repeated. More control of mailing procedures must be placed with the researcher. A specific study of this methodology is reported in the review of literature.

Recommendations

Based upon the conclusions, the following recommendations are made:

1. Supervised occupational experience programs, laboratory instruction, F.F.A. activities, and year-round availability of teachers must be continued and supported as in the past according to the opinions of these completers.

2. Teachers should emphasize to students the importance of career opportunities in the world of work, especially in agriculture. Opportunities exist in agriculture and completers did not overwhelmingly indicate that teachers encouraged them to enter an agricultural occupation or major in agriculture in college.

3. Programs for adults such as agribusiness classes and young farmer groups should be continued and strengthened. Although the

majority of the completers indicated some degree of participation in adult programs, these clients could be further served.

4. The specific methodology utilized in this study should not be repeated and alternatives should be considered. Statistical inference about the population can be made with only a .76 confidence level. Local teachers or telephone interviews could be used to locate and gather data.

5. Local follow-up procedures should be conducted to provide information for decision making to effect program improvement. Consistent local follow-up activities need to be coordinated to provide impact data for states and regions.

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APPENDIX
QUESTIONNAIRE

Columns
(1-10)

For Office Use Only

FOLLOW-UP SURVEY OF FORMER VOCATIONAL AGRICULTURE/AGRIBUSINESS STUDENTS

Instructions: Please read each statement and respond as indicated. Check only one item under each heading unless otherwise instructed. Your individual answers will be kept confidential.

- I. General Information
- (11,12) A. Age (in years) _____
- (13) B. Sex
 () 1. Male
 () 2. Female
- (14) C. Race
 () 1. Black
 () 2. White
 () 3. Spanish surname
 () 4. Other, please specify _____
- (15,16) D. Educational Level (circle highest grade completed)
- | | | | | | | | | | |
|-------------|---|----|----|----|---------|----|----|----|----|
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| High School | | | | | College | | | | |
- (17) E. Years of High School Courses in Vocational Agriculture
 () 1. Less than one year
 () 2. One year
 () 3. Two years
 () 4. Three years
 () 5. Four years
 () 6. Other (please specify) _____
- (18) F. Years of Membership in the Future Farmers of America (FFA)
 () 1. Less than one year
 () 2. One year
 () 3. Two years
 () 4. Three years
 () 5. Four years
 () 6. Other (please specify) _____
- (19) G. Highest Degree of Membership That You Received
 () 1. None
 () 2. Greenhand degree
 () 3. Chapter Farmer degree
 () 4. State Farmer degree
 () 5. American Farmer Degree
- (20) H. Years you were involved in the supervised Occupational Experience Program in Vocational Agriculture (also called summer projects, part-time work in agriculture, supervised farming programs, off-farm placement, co-op programs (VAOT), supervised work experience in agriculture, etc.)
 () 1. Less than one year
 () 2. One year
 () 3. Two years
 () 4. Three years
 () 5. Four years
 () 6. Other (please specify) _____

- (21) I. Years in Adult/Young Farmer Classes in Agriculture (evening, or continuing education classes)
- ☐ 1. Less than one year
 - ☐ 2. One year
 - ☐ 3. Two years
 - ☐ 4. Three years
 - ☐ 5. Four years
 - ☐ 6. Other (please specify) _____
- (22) J. Where you Lived Most of Your Life (while in High School)
- ☐ 1. On a farm
 - ☐ 2. In a rural area but not a farm
 - ☐ 3. In a small town
 - ☐ 4. In a city
- (23) K. Present Annual Gross Income - before taxes (will be strictly confidential)
- | | |
|---|---|
| <input type="checkbox"/> 1. Less than \$5,000 | <input type="checkbox"/> 8. \$20,000 - 22,499 |
| <input type="checkbox"/> 2. \$ 5,000 - 7,499 | <input type="checkbox"/> 9. 22,500 - 24,999 |
| <input type="checkbox"/> 3. 7,500 - 9,999 | <input type="checkbox"/> 10. 25,000 - 27,499 |
| <input type="checkbox"/> 4. 10,000 - 12,499 | <input type="checkbox"/> 11. 27,500 - 29,999 |
| <input type="checkbox"/> 5. 12,500 - 14,999 | <input type="checkbox"/> 12. 30,000 - 32,499 |
| <input type="checkbox"/> 6. 15,000 - 17,499 | <input type="checkbox"/> 13. 32,500 - 34,999 |
| <input type="checkbox"/> 7. 17,500 - 19,999 | <input type="checkbox"/> 14. Over \$35,000 |
- (24) L. Current Occupational Status (answer as many as apply)
- ☐ 1. Full-time farmer or rancher.
 - (25) ☐ 2. Part-time farmer or rancher (estimate the percentage of time devoted to farming or ranching: _____ %).
 - (26) ☐ 3. Agribusiness employee (examples: farm machinery parts clerk, duster pilot, chemical salesperson, feed mill employee, meat inspector, etc.) Please name your occupation, employer, and employer's address. _____
 - (27) ☐ 4. Horticulture employee (examples: greenhouse worker, retail florist worker or owner, garden center employee, etc.) Please name your occupation, employer, and employer's address. _____
 - (28) ☐ 5. Forestry/Natural resources employee (examples: logger, forest cruiser, park employee, wildlife conservation officer, etc.) Please name your occupation, employer, and employer's address. _____
 - (29) ☐ 6. Agricultural mechanics employee (examples: farm machinery mechanic, farm machinery mechanics helper, welder, etc.) Please name your occupation, employer, and employer's address. _____
 - (30) ☐ 7. Professional agricultural employee (examples: vocational agriculture teacher, extension agent, veterinarian, etc.) Please name your occupation, employer, and employer's address. _____
 - (31) ☐ 8. Non-agricultural occupation (examples: military service, textile worker, banker, etc.) Please name your occupation, employer, and employer's address. _____
 - (32) ☐ 9. Currently attending college (major _____)
 - (33) ☐ 10. Currently unemployed (please give reason _____)
 - (34) ☐ 11. Self-employed in agriculture (on or off farm).
 - (35) ☐ 12. Self-employed in an occupation not related to agriculture.

II. Opinions of Your Vocational Agriculture/Agribusiness Experience in High School

Instructions: Please give your opinion about each of the following statements. If you strongly disagree, circle "1"; if you disagree, circle "2"; if you are undecided or do not know, circle "3"; if you agree, circle "4"; if you strongly agree, circle "5".

		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
		SD	D	U	A	SA
A. My Experiences in Vocational Agriculture/Agribusiness - FFA:						
(36)	1. Helped me learn how to work	1	2	3	4	5
(37)	2. Taught me skills useful in an agricultural career	1	2	3	4	5
(38)	3. Taught me skills useful in a non-agricultural career	1	2	3	4	5
(39)	4. Helped me to choose an occupation	1	2	3	4	5
(40)	5. Helped me to enter and advance in an agricultural occupation	1	2	3	4	5
(41)	6. Helped me to enter and advance in a non-agricultural career	1	2	3	4	5
(42)	7. Helped me to learn how to get along with other people	1	2	3	4	5
(43)	8. Helped me develop leadership skills.	1	2	3	4	5
(44)	9. Helped me learn how to participate in meetings.	1	2	3	4	5
(45)	10. Helped me to stay in school	1	2	3	4	5
(46)	11. Encouraged me to go to college	1	2	3	4	5
(47)	12. Were good for me	1	2	3	4	5
(48)	13. Were of no benefit to me.	1	2	3	4	5
(49)	14. Were such that if I had it to do over I would enroll in Vocational Agriculture/Agribusiness - FFA again	1	2	3	4	5
B. My Teacher(s) in Vocational Agriculture/Agribusiness - FFA:						
(50)	1. Encouraged me to enter an occupation in agriculture	1	2	3	4	5
(51)	2. Encouraged me to major in agriculture in college	1	2	3	4	5
(52)	3. Provided me with information on careers outside Ag.	1	2	3	4	5
C. In My Opinion The Vocational Agriculture/Agribusiness - FFA Program:						
(53)	1. Should emphasize only farming in its instruction	1	2	3	4	5
(54)	2. Should emphasize farming and agribusiness in its instruction	1	2	3	4	5
(55)	3. Is useful to farmers in the community	1	2	3	4	5
(56)	4. Is useful to agribusiness persons in the community	1	2	3	4	5
	5. Should include, along with other instruction:					
(57)	a. FFA activities	1	2	3	4	5
(58)	b. Supervised occupational experience in agriculture (work experience) for students	1	2	3	4	5
(59)	c. Laboratory instruction (shop, greenhouse, forestry, plots)	1	2	3	4	5
(60)	d. Agriculture/Agribusiness instruction for adults with career interests in agriculture	1	2	3	4	5
(61)	6. Should have teachers available year-round (including the summer) to help farmers and other agricultural employees, vocational agriculture/agribusiness students, and FFA members with problems associated with agriculture	1	2	3	4	5

VITA²

Albert Byron Johnson, Jr.

Candidate for the Degree of

Doctor of Education

Thesis: A FOLLOW-UP STUDY OF 1973-74 OKLAHOMA VOCATIONAL AGRICULTURE
COMPLETERS

Major Field: Agricultural Education

Biographical:

Personal Data: Born in Springhill, Louisiana, December 13, 1948,
the son of Mr. and Mrs. Albert B. Johnson, Sr.

Education: Graduated from Haynesville High School, Haynesville,
Louisiana, May, 1966; received the Bachelor of Science degree
from Louisiana Tech University, Ruston, Louisiana, in March,
1971, with a major in Agricultural Education; received the
Master of Science degree from Louisiana Tech University,
Ruston, Louisiana, in February, 1974, with a major in Science
Education; attended Oklahoma State University, Stillwater,
Oklahoma, from August, 1977, to July, 1980; completed
requirements for Doctor of Education degree at Oklahoma
State University in July, 1980.

Professional Experience: Teacher of vocational agriculture at
Shongaloo High School, Shongaloo, Louisiana, January, 1971,
to August, 1976; teacher of vocational agriculture and
biology at Haynesville High School, Haynesville, Louisiana,
August, 1976, to May, 1977; graduate teaching and research
assistant at Oklahoma State University, Stillwater, Oklahoma,
August, 1977, to May, 1979; agricultural technician, Depart-
ment of Entomology, Oklahoma State University, Stillwater,
Oklahoma, August, 1979, to present, involved with face fly
research.

Organizations: Member of Phi Delta Kappa, Alpha Tau Alpha,
Shongaloo, Louisiana, Lodge #352, A.F.&A.M., former member
of Shongaloo, Louisiana, Lions Club and Fire Department,
Association of Classroom Teachers, Louisiana Teachers
Association, Collegiate F.F.A. Chapter, Louisiana Tech Uni-
versity Honorary Chapter Farmer, Shongaloo, Louisiana F.F.A.
Chapter and Honorary Member, Shongaloo Future Homemakers of
America.