Abstracts of research studies in vocational education provide a source of information for the researcher, the teacher, and the education community. Included are 48 masters' reports and theses in agriculture and home economics education completed at the Kansas State University during the period 1963 through 1968. The purpose, methodology, and findings are given for each study, and a subject and author index are included. (DM)
ABSTRACTS OF STUDIES IN VOCATIONAL EDUCATION

DONALD EUGENE ELSON

August 1968

Kansas Vocational Education Research Coordinating Unit
Research Foundation of Kansas
Topeka, Kansas
ABSTRACTS OF STUDIES IN VOCATIONAL EDUCATION

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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PREFACE

This volume of "Abstracts of Research Studies in Vocational Education" is the first in a series of publications. This series will include abstracts of vocational education research which has been completed at the colleges and universities in Kansas.

The purposes of this series of publications are: (1) to aid the researcher in his quest for background information, (2) to aid the teacher in finding new or improved teaching techniques, and (3) to acquaint the education community with the research which has been completed in vocational education.

This volume includes Master's reports and theses in Agricultural Education and Home Economics Education from Kansas State University for the period 1963 through the summer of 1968, inclusive.
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HOW TO USE THIS PUBLICATION

Each abstract contained herein has been numbered with a "KAN" number. In the Abstract section, the abstracts are numbered in consecutive order.

The reader who is searching for material on a particular subject should first turn to the Subject Index. Each abstract has been listed by "KAN" number under two or more subject headings, e.g., abstract number 001 is listed under the headings: Agricultural Education; Administration; Philosophy and Objectives; and Young Farmers.

On the other hand, if the reader wishes to review the abstract of a study conducted by a certain author, he should turn to the Author Index. This index is a complete bibliography of the abstracts included in this publication.

With either method of search, the reader, after identifying the "KAN" number of the desired abstract, can locate and review the abstract in the Abstract section.
Purpose: To gather information about vocational training and the experience of school administrators in South Central Kansas schools as well as their opinions regarding curriculum, subject matter, organization of classes, teachers, student development, and use and financing for vocational agriculture. The study also proposed to determine if there were definite patterns of opinions toward vocational agriculture held by the selected administrators.

Method: The data was obtained by personal interviews with administrators in the South Central Kansas schools that had vocational agriculture departments at the time of the study.

Findings: Eighty-two per cent of the administrators in the study had no formal training in vocational education. Fifty-nine of the 82 per cent felt that they should have had special vocational education, while 14 per cent had taught vocational subjects. Formal training ranged from three semester hours to 48 hours. These administrators' experience with vocational education varied from one year to 28 years. Average tenure at the present position was 6.13 years. Administrators felt that vocational agriculture should have specific objectives for the department. The school enrollment ranged from sixty-two to 1125. Approximately 10 per cent of all students enrolled in these schools were enrolled in vocational agriculture. Eighty-six per cent of the administrators felt that vocational agriculture was an integral part of the secondary school program. Seventy-two per cent of the administrators felt that young farmer and adult program was an integral part of the total school program. Sixty-eight per cent of the administrators felt that there should be a minimum and a maximum size class in vocational agriculture. The average for the minimum was 8 students and the maximum was 20 students. Seventy-two per cent of the administrators felt that teaching vocational agriculture should be a full-time responsibility for one person; 50 per cent felt that there should be a required course of study outline in the fall. A majority of the administrators felt that vocational agriculture helped students to think, study, and develop ability to solve problems. They did not require students to take vocational agriculture, and a majority felt that college bound students should take vocational agriculture if interested in agriculture. It was believed by the administrators that a majority of the vocational agriculture departments meet the needs of the community and need a budget for operation. The administrators felt that vocational agriculture was a costly program, but the development and teaching of students justified the high cost. A majority felt that it did not cost any more than other shop programs.
Crandall, Lester Lyle


Purpose: The purpose of this study was to determine the attitudes of businessmen in Ellsworth County, Kansas, toward the gainful employment opportunities for high school graduates.

Method: The information in this study was obtained through a questionnaire mailed to two hundred and eight businessmen in Ellsworth County. It included the thinking of one hundred eighty employers in the five towns in Ellsworth County.

Findings: From the survey the following trends were determined: Agriculture and agricultural services were the leading industries in Ellsworth County. Jobs for the unskilled group were decreasing and the demand for skilled or trained employees was increasing. There were very few job openings predicted for new employees in the next five years, unless new industries located in Ellsworth County. Most employers required at least a high school education or vocational training for their employees. The businesses that preferred their applicants to have additional training before applying for the position were the businesses that have had difficulty in finding qualified employees and were in the higher wage bracket. There was not much interest shown in the hiring of part-time employees taking vocational training. There was an increase in the number of employees hired in over fifty per cent of the businesses. This survey indicated most employers realized the future of our county depends on our youth and were willing to do whatever was necessary to establish job opportunities. The city of Ellsworth had gained in population but the county showed a net loss. The loss in population had been between the ages of fifteen and forty-five years of age, while gains were shown in age groups under fifteen and over fifty-five years of age. The problem was of concern, not only to high school graduates and businessmen, but to all citizens of our county. The fact that new industry had not replaced those going out of business, had resulted in a decrease of job opportunities, thereby forcing more high school graduates to seek employment elsewhere. The number of high school graduates who remained in Ellsworth County for gainful employment has decreased; the number of graduates going on to some form of higher education has increased. These were the youth for which job opportunities should have been provided, if the rural communities in Ellsworth County were to be socially and economically strong and progressive.
Agriculture Mechanics Activities for High School Students. Master's Report, 1967, Kansas State University, Library, Kansas State University, Manhattan.

Purpose: The purpose of this study was to give guidance to the agriculture mechanics part of the vocational agriculture program at Hillsboro High School.

Method: Eighteen parents were interviewed in the collection of data. The research population consisted of the parents of Hillsboro High School rural male graduates for the years 1966 and 1967. A questionnaire was developed in order to give parents an opportunity to select which abilities they considered important. The questionnaire was set up in twenty areas. Each of the areas was broken down into a number of skills or abilities, and the parents were asked to study each ability in each area and mark the abilities they thought a rural male high school graduate should be able to achieve.

Findings: There were some variations of responses between the two groups of parents concerning a certain ability. However, in most instances of differences, the variation was not greater than 33.3 per cent. But in one case the variation was 66.7 per cent. It appears that the responses of parents were rather consistent as to the need of various abilities. In the responses concerning various abilities, it was noted that the responses ranged all the way from 100 per cent on some abilities to zero per cent on one ability. This would indicate that the questionnaire covered a wide enough range to give parents an opportunity to mark their choice. The data in Tables I through XX show that fifteen abilities out of the ninety-nine were marked by 100 per cent of those interviewed. The data further indicate that 28.2 per cent of the abilities were marked as necessary by 90 per cent or more of the responses, and only 1 per cent of the abilities were marked by less than 9 per cent of the responses. Seventy per cent of parents of rural male graduates of Hillsboro High School for the years 1966 and 1967 marked 58.5 per cent of the abilities as needed for high school graduates. The responses to the questionnaire showed that 40.5 per cent of the abilities were selected by not less than 10 per cent and not more than 69 per cent of the parents interviewed.
Doll, Wayne Frederick

A Proposed Seminar in Agricultural Mechanics for International Students at Kansas State University. Master's Report. 1965, Kansas State University. 52 p. Library, Kansas State University, Manhattan.

Purpose: To develop a seminar in Agricultural Mechanics for international students.

Method: The creative method of research was used in this study. Procedures used to collect, analyze, and present data included the use of letters, interviews, documentary material, and the observations made during the development of an Agricultural Engineering problem designed to help international students gain mechanical skills.

Findings: This study indicated the need for establishing a seminar for the purpose of solving the problems caused by lack of mechanical skills. It also indicated that the seminar should be a non-credit requirement for all international students enrolled in the Agricultural Mechanics classes, that it should meet once a week during a two to three hour period in the Agricultural Engineering Building, and that it should be flexible enough to attempt to meet the students' problems as they occur, and should be a continuous program as long as there is a sufficient number of international students who need help in acquiring mechanical skills.
Eck, Roy F.


Purpose: The central problem of the study was to discover some competencies needed by employees of farm machinery dealers in order that vocational agriculture departments, vocational technical schools and junior colleges could qualify their graduates for gainful employment with farm machinery dealers.

Method: The responses given to the questionnaire by the dealers were analyzed by assigning a weighted value. Items which were rated as "essential" were assigned 4 points; "very important," 3 points; "important," 2 points; "little importance," one point; and "no importance," 0 points. All competencies receiving an average rating of "essential," (3.0 to 4.0 points) were to be considered as important in developing a training curriculum.

Findings: The ten farm machinery dealers rated 75 from a total of 93 competencies as "essential," (3.0 to 4.0 points) for employment in the farm machinery industry. These 75 competencies could be considered by the vocational agriculture departments, vocational technical schools, and junior colleges in developing a curricula for educating personnel for gainful employment with farm machinery dealers. The area farm machinery dealers (one to a town) rated 84 of the 93 competencies as "essential" (3.0 to 4.0 points), eight as "very important," (2.0 to 2.9 points), and one as "important," (1.0 to 1.9 points). The Atchison dealers, five to a town, rated 56 as "essential," (3.0 to 4.0 points) 35 "very important," (2.0 to 2.9 points), and two as "important," (1.0 to 1.9 points). The area dealers rated more (30.1 per cent) of the competencies as "essential" (3.0 to 4.0 points), than did the Atchison dealers. All ten dealers would employ from one to three men if they were qualified. Six dealers would hire one man; three dealers two men; and one dealer three men. All companies sponsored clinics for the training of employees in dealerships. Eight dealers held clinics for mechanics with the dealers paying the tuition fees. All ten dealers had night clinics at the dealership for machinery assembly and adjustment personnel, and seven dealers had clinics for parts and sales personnel. Fourteen machines were reported as being repaired and serviced by each of the ten dealers. The other machines which dealers reported that they repaired and serviced were as follows: small engines, seven dealers; small garden tractors, three dealers; anhydrous ammonia applicators, one dealer. All ten dealers reported that they did not intend to add additional services unless it was necessary to increase the efficiency of the dealership.
Contestants in the Kansas Agriculture Judging Contests. Master's Report, 1966, Kansas State University. Library, Kansas State University, Manhattan.

**Purpose:** The purpose of this study was to make a status study of selected contestants to (1) determine the training of the contestants, (2) secure the contestant's evaluation of judging contests, (3) compare the information from the winning contestant and a teammate, and (4) tabulate the winner by FFA districts.

**Method:** The data for this report was secured through the use of a questionnaire mailed to the state winning contestant and a teammate of his in five areas—livestock, dairy cattle, poultry, and agronomy for the years 1961-65 and horticulture for the years 1963-65. Record checks were made of the minutes of the College Contest Committee and state contest records.

**Findings:** Sixty-eight per cent of the winning contestants and seventy-three per cent of their teammates were in college working on a degree or had completed their degree. Of these, seventy-one per cent of the winning contestants and sixty-seven per cent of their teammates were preparing for ranching, farming or an agricultural related occupation. The winning contestants averaged entering 2.9 areas on the state level and their teammates 3.0 areas. The teammates had more years of training but less hours of training in each judging area than the winning contestants. Those competing in livestock judging had the most years of training but those in dairy cattle judging had the most hours in training. Over eighty-four per cent of the winning contestants and eighty per cent of their teammates were in the twelfth grade at the time of competing on the state level. Sixty-one per cent of the contestants rated the value of the contests in which they judged as very high. Only one per cent of the winning contestants and twelve per cent of their teammates rated any contest as very low. The area marked most by the winning contestants in determining how their training experience helped them prepare for a vocation was that it provided necessary leadership training. The FFA or high school vocational agriculture classes were the leading area in providing these experiences with judging activities being marked as the first choice of eighty-four per cent of the winning contestants and eighty-six per cent of their teammates. The most influencing factor in helping the contestants choose their proposed vocation was their teachers with the vocational agriculture teacher being named most. Of the seven FFA districts in Kansas, over one-half of the winning contestants came from the southeast district. Two of the districts did not have any winning contestants. When asked to discuss how participation in judging had helped them, all but four replied. A winning contestant summed up most of the comments when he wrote that "participating has given me the desire to accomplish to my best every task by using my natural abilities even amidst much distraction."
Flory, Joseph Roland

Farm Entry Opportunities for Young Farmers in the Holton Unified School District During the Period 1965 to 1975, Master's Report, 1965, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: This study was conducted in the Holton Unified School District of Jackson County, Kansas, to determine the opportunities for young farmers to enter farming during the period 1965 to 1975.

Method: Information was obtained through a questionnaire sent to farmers operating 80 or more acres in the district. Of the 225 questionnaires distributed, 179 or 70 per cent were returned and tabulated.

Findings: The decline in the number of farms in the county was evident in that 21.7 per cent had been lost to consolidation in the past decade. However, through the review of literature, it was the opinion of some writers that opportunities did exist for young men who desired to enter farming in the areas studied. Similar studies reviewed indicated that 25 to 50 per cent of recent vocational agriculture graduates were engaged in farming. Some surveys indicated that farming opportunities would be available for approximately 50 per cent of the vocational agriculture graduates and this figure corresponded closely with the number of young men desiring to enter farming. It was suggested in several studies that the arrangement of partnerships and parental assistance were the most desirable means of becoming established in farming. The farmers in the area surveyed operated an average of 345 acres, 203 of which was owned, and had an average gross farm income of $8,787. This was nearly $2,000 below the state average. Forty and eight tenths per cent of the operators owned all of the land that they operated. The average investment in land was found to be $23,558, less than half the state average. The respondents had an average age of 48.9 years and had farmed an average of 20.5 years in the district. Sixty-four and eight tenths per cent of the operators had at least 12 years of education. Fifty-seven and five tenths per cent of the farmers had off-farm jobs amounting to $3,853 of additional income. Ninety-three and nine tenths per cent of the respondents were married and 29.6 per cent of the wives were employed. Beef cows were found to be handled by 81 per cent of the operators. Beef fattening was the second most common enterprise with 42.5 per cent, 37.4 per cent had feeder pigs, 28.5 per cent raised pigs, 25.1 per cent had dairy cows and 6.1 per cent raised sheep. Seven methods were used to project the number of farming opportunities that might become available. Projection of death, change of occupation, retirement plans, consolidation, adjusted gross incomes, and adjusted acreages were factors used to project the number of farming opportunities that would likely return at least $10,000 gross income. Results of the various methods indicated that minus 11.4 to plus 80.8 openings in the next decade would become available with the average being just under 50 or 5 farming opportunities per year. This was concluded to more than satisfy the needs of the vocational agriculture graduates from Holton High School that would desire to enter farming. It was further concluded that 360 acres or more would be needed to attain a satisfactory living.
A Source Unit on Swine Production and Management. Master's Report, 1964, State University. 90 p. Library, Kansas State University, Manhattan.

Purposes: To evaluate source materials and to develop a source unit that might be used by teachers of vocational agriculture in preparing and teaching lessons on swine production and management.

Method: The following procedures were used:
1. A tentative source unit was developed. It contained information in the following areas:
   a. History and Development of the Swine Industry
   b. Types and Breeds of Swine
   c. Swine Breeding
   d. Swine Nutrition
   e. Diseases and Parasites of Swine
   f. Housing and Equipment for Swine
   g. Swine Marketing
   h. Management Practices for Swine
2. The tentative source unit was submitted to an advisory committee of two specialists: One from the field of agricultural education who reviewed the source unit from the standpoint of its organization and its value in meeting the needs of vocational agriculture teachers; and one from the field of animal husbandry who reviewed the source unit from the standpoint of technical information.
3. The usefulness of the material in the source unit was evaluated by a comparison of pre-test and post-test scores taken in connection with the teaching of lessons from the unit to Goessel Rural High School vocational agriculture students. These students were divided into two groups. The freshmen and seniors were the control group and the sophomores and juniors the experimental group.

Findings: Those students which received instruction from the source unit increased their scores from the pre-test to the post-test by 10.98 per cent. Those students not having access to the material increased their scores by 0.61 per cent. There was a total difference of 10.37 per cent between the experimental group and the control group.
Guinn, Don Gayland

A Study of High School Curriculum as it Influenced Former Male Students of Decatur Community High School. Master's Report, 1965, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The basic concern of this study was to ascertain what relationship existed between the curriculum taken by students and the present occupations of former students of Decatur Community High School, Oberlin, Kansas. Also studied was the students' opinions, whether curriculum revisions and/or new developments were necessary.

Method: A questionnaire was used to gather information from the high school graduates.

Findings: Of those students returning questionnaires, 17 per cent were farming, 20 per cent had occupations other than farming, 40 per cent were in college, and 23 per cent were in the armed services. In addition, more than half the boys (60 per cent) thought that a college education would help them find a job more to their liking. Fifty-three per cent felt that they had taken the proper courses in high school. Regarding the question of contribution of certain subjects, 75 per cent of the boys indicated that mathematics contributed much; 60 per cent considered science of much contribution. Of those majoring in vocational agriculture, 63 per cent felt it contributed much to their present success. When asked if they would have liked more, less, or no change in various subjects taken in high school, a greater percentage of the boys wanted "more" mathematics and science, with English, social science, commercial subjects, and foreign language following closely. No more than 10 per cent indicated they would want less of any subject taken. These statistics indicate that, in general, students would have liked more courses in their high school training. Out-migration was a factor considered in this study and it was found that 36 per cent of the total group lived in the community. Of this group, 66 per cent were graduates and 34 per cent were drop-outs. Also, 61 per cent of the graduates who stayed in the community were farming.
Hundley, James Lowell


**Purpose:** To determine the functions of the vocational agriculture advisory council.

**Method:** Questionnaires were distributed to area vocational agriculture teacher conferences and given out by the state supervisory staff. Each teacher was asked to complete the questionnaire and express his feelings regarding the degree of participation by the council. Each of the functions was given a rating scale: 1- always, 2- most always, 3- seldom, 4- very seldom and 5- never. A weighted value was also used to determine the degree of participation by the council. The five responses were then grouped into three areas: 1- always and most always, 2- seldom and very seldom and 3- never. A percentage was figured for each area. A total of 69 questionnaires was completed at eight area conferences selected by the author and state supervisor to include all areas in the state. The data collected through the use of the questionnaire was evaluated in each of the areas mentioned. The advisory council was defined in this study as a group of citizens appointed by the board of education.

**Findings:** The area receiving the highest total point value average was community related. It was found that the advisory council had a responsibility in developing community understanding for the program of vocational agriculture. It served as a link of communication between the patrons in the community and the school. The second highest total point average was in the area of advisory council and teacher relationships. The survey showed it was a function of the council to help guide and assist the teacher on special problems and to strengthen the security of a successful teacher. Functions of the advisory council in regard to public relations had the third highest total point average. Teachers responded favorably to these functions: serving as a buffer between community and department regarding vocational agriculture programs and acquainting administrators with farm patrons through the participation in an open house.
Purpose: This study was made for the purpose of obtaining answers to the following question areas from these graduates of Peabody High School; further education after graduation from high school; number of years each male graduate had taken vocational agriculture; percentage of graduates taking one or more years of vocational agriculture employed in farming or agri-related occupations; estimated present salary; extracurricular activities considered to have been most valuable to the graduate; courses taken in high school that, in their opinion, had proven valuable or of little value after graduation.

Method: Questionnaires, along with a cover letter and self-addressed return envelope, were mailed to the 256 (1951-1966) male graduates of Peabody High School. A reminder card was mailed out three weeks after the initial letter. Questionnaires were returned by 121 of the 256 male graduates. Nine of the graduates returned the questionnaire unanswered. No addresses could be found for eighteen of the graduates.

Findings: The summary showed eighty-six of the one hundred twenty-one graduates (71 per cent) attended schools of higher learning. Three (2.3 per cent) of the graduates entered the armed forces and twenty-one (17 per cent) entered the field of work. It was found that seventy-eight of the respondents entered a four-year college or university. Of these, sixteen did not complete their college work, twenty-seven are still working toward a degree, thirty-seven completed four years of college, and seven completed advanced degrees. It was found that eighteen (15 per cent) of the one hundred twenty-one respondents completed one year of vocational agriculture, seven (6 per cent) completed two years, thirteen (11 per cent) three years, and thirty-seven (31 per cent) completed four years. The survey showed that forty-nine (65 per cent) of the respondents that had taken one or more years of vocational agriculture were employed in either farming, agri-business, part-time farming or part-time agri-business. According to the study twenty-five (20 per cent) of the graduates were earning less than $3,000 annually, twenty-nine (24 per cent) were earning between $3,000 and $3,900, forty-one (34 per cent) were earning from $5,000 to $7,500, and twenty-seven (22 per cent) were earning over $7,500. The overall average was $5,600.40. It was noted that forty-five per cent of the students taking one or more years of vocational agriculture indicated this course had proven valuable since graduation, while ten per cent stated it had not proven valuable to them. It was found that eighty-five per cent of the respondents indicated a benefit from all extra-class participation. Nine per cent stated no benefit. The returns disclosed that thirty-eight per cent of the respondents indicated the FFA as receiving the most one ratings in extra-class activities, with football receiving the next highest rating getting fourteen per cent one ratings. The other seven available extra-class activities received fewer one ratings.

**Purposes:** To determine the methods and resources used by vocational agriculture teachers in teaching animal husbandry to high school vocational agriculture students. Specific objectives included determining: (1) the relative emphasis given areas in animal husbandry as recommended by teachers of vocational agriculture, (2) the resources most useful to vocational agriculture teachers in teaching animal husbandry, (3) the methods of instructions being used by teachers of vocational agriculture in teaching animal husbandry classes, and (4) the time allotted in the curriculum of teaching animal husbandry by years.

**Method:** Fourteen vocational agriculture teachers in Kansas were contacted personally. A check list of questions was prepared and the teachers were asked to respond orally to them while the interviewer filled in the blanks as the questions were answered.

**Findings:** The teachers rated beef cattle, animal health, feeds and feeding, and swine production as the most important areas in animal husbandry. Vocational agriculture teachers would rather teach animal husbandry to high school students than young and adult farmer classes. The teachers devoted more time during the sophomore year to animal husbandry than any of the other years. The best aids in animal husbandry teaching included the teacher's personal farm background, university specialists, bulletins, reference books, farm magazines, movies, and commercial literature. Farm manager was the least value as an aid in teaching. The teachers rated lecture, field trips, and visual aids as the most useful methods in teaching animal husbandry. Work books had the least value in teaching.
Kalaton, Prayonk

A Study of the Responsibilities and Activities of Kansas Vocational Agriculture Teachers for the Year 1959. Master's Report, 1964, Kansas State University, 73 p. Library, Kansas State University, Manhattan.

**Purposes:** To analyze selected responsibilities and activities of Kansas vocational agriculture teachers other than teaching in regular classes. Those responsibilities and activities which were of special interest in the study were: (1) the visiting of homes of students; (2) the conduction of class trips for regular instructional purposes, (3) the sponsoring of trips, (4) the training of students for contests, (5) the supervising of students' farming programs, (6) the conducting of meetings other than day classes, (7) the writing of newspaper articles, (8) the rendering of community services, (9) the cooperating with other agricultural efforts, (10) the following up of graduates who are placed in farming, and (11) the belonging to and participating in organizations.

**Method:** The data was obtained by an analysis of the Annual Agricultural Report as kept on file by the State Board for Vocational Education. The reports studied were the ones submitted by the teachers of 196 vocational agricultural departments in the state of Kansas.

**Findings:** The findings indicated that for the year 1959 the average teacher of vocational agriculture in the state of Kansas:

1. had 35 students in his teaching load
2. had seven students who graduated at the end of the year
3. had three graduates or 42.86 per cent of the students who graduated placed in farming to follow-up
4. visited the homes of each student three times per year
5. traveled 3,653.11 miles in supervision and community work
6. conducted 41 class field trips for regular instructional purposes, or ten trips per class
7. conducted three sponsored trips
8. trained five teams of students for contests
9. supervised the students' farming programs. Each student completed two projects in improvement practices and three projects in supplementary farm practices
10. conducted one parent meeting
11. held the parent-son banquet once (approximately 86 per cent of the teachers held the banquet in the 1959 school year)
12. conducted thirteen other meetings
13. wrote nineteen newspaper articles
14. supervised the students in rendering four community services to the farmers
15. helped the students in cooperative efforts twice, and
16. belonged to four organizations.
Kewanston, Harold Dean

Farm Income of Young Farmers Enrolled in Farm Business Analysis. Master's Report, 1965, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The problem was to determine if the rate of change in farm income of young farmers in Kansas was accelerated during the time they received instruction in farm business analysis.

Method: A random sample technique was used to select fifty young farmers that had received instruction in farm business analysis. An attempt was made to interview each of these young farmers to determine farm income for the years 1960 through 1964. Thirty-eight were interviewed. Farm income figures for the same period from the state Farm Management Summary were used for the farm management group. Realized net farm income for the state average group was taken from the Kansas State Board of Agriculture reports.

Findings: Net farm income was determined for each group for the years 1960 through 1964. The farm business analysis group gained an average of $693 per year before instruction was given. During the same three years the farm management group had gained at the rate of $309 per year and the state average group had gained at the rate of $722 per year. It was predicted that the farm income would continue to increase at these rates or that variation would be at constant rates for each group. Farm income increased at a rate of $164 per year for the farm business analysis group after instruction was given. The farm management group had a reduction of $1,799 per year and the state average group had a reduction of $541 per year during the same two years. The variances in farm income and in the rate of change were tested at the .05 level of confidence by analysis of variance and the t Test. No significant difference was found between the state average group and the farm business analysis group for either the amount of change in farm income or the variance from the predicted rate of increase. The farm management group was found to have a significantly higher farm income during the first three years when compared with either of the other groups. The variance from the predicted rate of change for the farm management group was significant when compared with the farm business analysis group and not significant when compared with the state average group. From the results of the study it was concluded that since the farm income of the farm management group varied significantly from the other groups for the years 1960 through 1962 it could not be compared with the other groups during the last two years. Although some variance did occur in favor of the farm business analysis group, it was concluded that no significant differences had occurred in the rate of change of farm income after farm business analysis instruction was offered.
Loomis, Harold I.


Purpose: This study developed around the assumption of the investigator that problems could arise from vocational agriculture students making false analogies between livestock and human reproduction. The central question of the study was whether some of the areas could be identified and that the inclusion of sex education material would keep these areas of false analogies between livestock and humans from developing.

Method: A questionnaire was given to both the control group and the experimental group, so a comparison could be made which covered areas of human reproduction. Both the control and the experimental groups were composed of nine sophomore boys studying vocational agriculture. The control group was located at Frankfort High School. The experimental group studied at Silver Lake High School. The control group studied only livestock reproduction while the experimental group studied both livestock and human reproduction. At the end of the study, both groups were again given the same questionnaire, and a comparison of their responses was made to determine any problem areas and if the inclusion of human sex education information helped solve them.

Findings: It was found that the questionnaire located the problem areas relating directly to the teaching of livestock reproduction. These were: the students of both groups changed their ideas about the location of the reproductive canal to a false conception of its location, and the students of the experimental group did not change their ideas about the misconception that human females have estrus symptoms like those of livestock to the correct conception as the control group was able to do. The findings also located two areas which could be corrected if reproduction were explained in a way that would eliminate the students drawing misconceptions in these areas. They were: the students of both groups failed to realize that ova has to be present before menstruation will occur; therefore, a female could become pregnant before her first menstruation after giving birth to a child; and the vagina contains small, sharp hook-like or teeth-like projections to which the experimental group responded incorrectly at the beginning of the study but not at the end, and the control group responded correctly at the beginning but did not at the end. Four assumptions were drawn by the investigator from the study.
Selected Characteristics of and Projections for Vocational Agriculture in Kansas Area Vocational-Technical Schools. Master's Report, 1965, Kansas State University, Library, Kansas State University, Manhattan.

Purpose: The central purpose of this study was to determine selected characteristics of and projections for vocational agriculture in KAVTS. It was a further purpose to compile selected basic information which could be used as guidelines in the future establishment and maintenance of vocational agriculture in KAVTS.

Method: Twelve vocational agriculture departments in seven KAVTS were involved in the study. Data were obtained by use of an interview checklist-questionnaire developed with the aid of an informal panel of consultants. The interview checklist-questionnaire was divided into two parts, Form I and Form II. Twelve vocational agriculture instructors were interviewed about the selected characteristics of vocational agriculture in KAVTS in Form I. These twelve instructors along with eleven directors and assistant directors of KAVTS responded to Form II dealing with projections for vocational agriculture in KAVTS. A 100 per cent response was obtained.

Findings: A simple analysis of data compiled from completed survey form indicated a variation of judgments and opinions. The following conclusions were considered as basic findings of the study: (1) Of a total of 740 students in KAVTS, eleven or 1.5 per cent represented high school students served on an area basis. This number represented 2.3 per cent of the total high school vocational agriculture enrollment. (2) All twelve or 100 per cent of post-high school students enrolled in day school vocational agriculture in KAVTS were served on an area basis. (3) One vocational agriculture department in KAVTS had a cooperative program in effect. One hundred per cent of the directors and 83.3 per cent of the instructors stated that cooperative training would be carried on in the future. (4) According to 66.7 per cent of the directors' responses and 74.5 per cent of the vocational agriculture instructors' responses, the major purposes of vocational agriculture in the future would be job preparation for an occupation, to train for off-farm agricultural occupations, to provide a basis for agricultural professions and to continue to train for farming. (5) One hundred per cent of directors and vocational agriculture instructors stated that surveys of local, area and state employment needs would be made to determine what areas or courses would be offered in vocational agriculture in KAVTS. (6) Directors felt that an average of 67.3 per cent and instructors felt that an average of 83.1 per cent of post-high school students completing training in vocational agriculture in KAVTS would be placed in home and surrounding counties. (7) It was projected by both directors and vocational agriculture instructors that the number of vocational agriculture instructors in KAVTS would more than double in the next three years. (8) It was projected by directors and vocational agriculture instructors that total enrollment in vocational agriculture in KAVTS would increase greater than 70 per cent in the next three years. Projected adult enrollment would more than double and projected post-high school enrollment would increase from twelve to more than two hundred students.
McCune, Duane A.

A Study for the Need for an Area Vocational-Technical School in the Dickinson County Community High School District. Master's Report, 1964, Kansas State University. 66 p. Library, Kansas State University, Manhattan.

**Purposes:** (1) To determine the present jobs and occupations of male graduates who had graduated from Dickinson County Community High School District since the year 1950 to 1964 and live within a twenty mile radius of the high school; (2) to discover what areas of additional training they felt were needed for their present job; (3) to find out how many would attend an Area Vocational-Technical School if given opportunity; (4) to discover what occupations or areas were most interesting to those who would attend; (5) to determine what seasons of the year and time of day would be most suitable for those who would attend; (6) to discover what would be the maximum time they would spend in training and the distance they would travel for such training; and (7) to find out if they would be willing to pay a reasonable tuition to attend this school.

**Method:** The male graduates of Dickinson County Community High School from the classes of 1950 to 1963 inclusive were selected as the source from which the population was taken for this study. The names of the population studied were available from the alumni files of the high school. There were 453 male graduates in the original list of graduates. The population for this study was secured by locating the graduates who maintained their permanent residence within a twenty mile radius of Chapman, Kansas. There were 244 graduates located within the twenty mile radius. The information in this study was secured by means of a questionnaire which was sent to the 244 graduates selected for study.

**Findings:** This study showed that 71.64 per cent of those responding indicated they would attend an Area Vocational-Technical School if it were available. It was found that 18.82 per cent would not attend and 9.54 per cent were undecided. Those who preferred to attend classes during the winter made up 79.26 per cent of the returned questionnaires. The data showed that 93.32 per cent could attend best from 7:00 p.m. to 10:00 p.m. It was found that 51.94 per cent felt the maximum time they could attend would be from 19 to 23 weeks. It was assumed from the data that the majority preferred a maximum travel distance of 10 to 25 miles for attending an Area Vocational-Technical School. The study showed that 88.56 per cent were willing to pay tuition to attend the area school.
KAN-000-018

OLSEN, LESLIE A.


Purpose: To determine the policies of financing livestock programs by commercial banks of Kansas.

Method: The information for this report was obtained by mailing a questionnaire to commercial banks in Kansas having agricultural representatives. Questionnaires were sent to a total of sixty banks in Kansas having agricultural representatives.

Findings: Commercial banks reported that an average of 8 per cent of their livestock loans were made for three months or less, 68 per cent were made for a period of four to six months, 21 per cent were made for a period of seven months to one year, and 3 per cent were made for more than one year. The livestock loans were reviewed by the end of six months by 85 per cent of the banks. Farm customers were visited once per year by 50 per cent of the banks. Two per cent reported visiting their farmers three times per year. Eighty-six per cent of the banks rated management ability and character as being always important in determining the repayment ability of an individual farmer.
Purpose: The purpose of this study was to determine the present occupational status of the students of the Onaga Rural High School who had taken four years of vocational agriculture during the years 1944 to 1964 inclusive.

Method: For the survey, questionnaires along with cover letters and stamped self-addressed envelopes were mailed to 126 former vocational agriculture students of the Onaga Rural High School who had taken four years of vocational agriculture. Four of the former students were deceased, and the addresses of six could not be found. Eight of the questionnaires were not returned. No follow-up letter was mailed as 118 out of 126 letters sent were returned, or a 93.65 per cent return.

Findings: This study showed that 55.2 per cent of the farm boys that married farm girls were still farming at the time of this report. Three per cent of the farm boys that married city girls were still farming. It was found that 33.3 per cent of the farm boys felt that the program should be changed from that which had been taken when in high school. Twenty-six and four-tenths per cent of the city boys felt that it should be changed. The most frequent changes made by both groups were as follows: keep program up-to-date; teach more ag-related subjects; have more shop work; teach more farm chemicals; and do more blueprint work. Returns disclosed that the most benefit derived from the vocational agriculture program had been in the following areas: the shop or farm mechanics part; the livestock part; the record book part; the F.F.A. part; and the crops part. It was found that the boys farming at the time of the report had a higher total investment than those in the ag-related and non-agriculture fields. Forty-eight and five-tenths per cent of the ag-related fields and 69.2 per cent of the non-agriculture fields had no investment in their present jobs. The survey showed that the boys farming reached a higher income bracket than those of the ag-related and non-agriculture fields. This study revealed that boys with investments of over $1,000 at graduation time were all farming at the time of this report. Boys with high investments at graduation time that did not start farming entered armed services, went to college, and attended trade schools.
Pandya, D. N.


**Purposes:** To study the courses of agriculture taught in the high schools of the State of Kansas and Gujarat (India); and to study to what extent the teaching of agriculture in the high schools helped to meet the objectives of Vocational Agriculture as presented in Policy Bulletin No. 1.

**Method:** The best ten high schools of Kansas and Gujarat were selected by the State Supervisor, Agricultural Education, State Board of Vocational Education, Topeka, and the Director of Agriculture, Gujarat State, Ahmedabad, respectively. The required information from these high schools was collected by means of a mailed check list and survey form.

**Findings:** Teaching of courses such as parliamentary procedure, farmers' organizations like Future Farmers of America, farm laws, rural living, rural electrification, farm mechanics especially maintenance and repairs of farm machinery and use of resource persons to aid in teaching was found less in Gujarat. Courses prescribed by the Government Department of Education were followed in the high schools of Gujarat and they were less flexible. The teachers in Gujarat were found not to be visiting the students' home farms. The students undertook supervised farming programs and plot work in Kansas and Gujarat, respectively. The selection of students for agriculture courses were done by 70 per cent of the selected high schools of Kansas, while no selection was done in Gujarat. The percentage of agriculture teachers who were found to be teaching subjects other than agriculture was 55 and 77.7 in Kansas and Gujarat, respectively. Supervised farming practices, procedure of visiting students' home farms by the teachers, teaching parliamentary procedure, farm mechanics such as maintenance and repairs of farm machinery and training for leadership by making the students active members of organizations like the Future Farmers of America should be introduced in Gujarat. In Gujarat courses to be taught should be flexible and should be decided by consulting the farmers, members of the advisory committee, past students, employers of the students, etc. The teachers of high schools of both the states should be relieved from the duty of teaching subjects other than agriculture to enable them to devote more time for on-farm instruction to the individual student. In Gujarat the load in terms of students per teacher should be less, so that the teacher can teach and supervise the students individually, which is required in teaching agriculture.
A Study of Academic Achievement of Foreign Students at Kansas State University. Master's Report, 1964, Kansas State University. 98 p. Library, Kansas State University, Manhattan.

**Purposes:** To determine the significance of certain factors which were believed to be related to the academic achievement of graduate and undergraduate foreign students at Kansas State University in the Fall and Spring Semester, 1963-64. The factors studied were: (1) English proficiency, (2) academic background, (3) number of credit hours carried each semester, (4) major subject field, (5) extracurricular participation, (6) employment during the educational process, (7) residence, (8) sex and marital status, (9) age, (10) type of sponsors and financial status, and (11) geographical area.

**Method:** Questionnaires were sent to foreign students who were enrolled in classes at Kansas State University the Spring Semester 1964. Grade point averages, lists of students, and results of English proficiency tests were obtained from offices of Admissions and Records, Dean of Foreign Students, and the English Department, respectively.

**Findings:** Foreign students who had high abilities in English proficiency and a good academic background achieved the greatest academic success. Those who carried fewer credit hours generally earned a better grade point average. However, there was no definite correlation between credit hours and academic success. This varied widely within each major subject field. Graduate students who participated in extracurricular activities and undergraduate students who were non-participants in extracurricular activities had high academic success. Unemployed students had greater academic success than employed students. Graduates who lived in dormitories had a slightly higher grade point average than those who lived in private apartments. When students from the same country lived in apartments together, they had less academic success than those who lived separately. Men students had greater academic success than women. Married graduate and undergraduate students had greater academic success. Privately supported students received a lower grade point average than other groups of students. Academic success of foreign students varied widely within each country. European students had the greatest academic success. There was no definite correlation between academic success and the age of students. English problems and subject difficulty had the greatest effect on the studies of foreign students.
Parker, Leonard Calvin

Farm Income of Selected Former Vocational Agriculture Students in Northeast Kansas. Master's Report, 1967, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The purpose of this study was to survey the relationship between former training in high school vocational agriculture and later financial returns from farming.

Method: One hundred twenty-five members of Northeast Kansas Extension Farm Management Association Number 4 were selected as possible subjects for the study. The study was limited to full time, individual farm operators, not over sixty years old, with five years continuous records in the Farm Management Association. Farming operations that had been interrupted by condemnation action were also eliminated from the study. A mail questionnaire was used to survey the educational background of these farmers. There were 112 completed questionnaires returned. The source of financial data for the study was from the individual farm records maintained for analysis purposes by the Farm Management Association. More detailed examination of these records produced ninety-one records that were suitable for the study. These records were all maintained on an inventory basis even though the farmer was on the cash basis for income tax purposes. The data in this report was not subjected to statistical analysis beyond frequency distribution and the determination of central tendency as reflected by the mean. The ninety-one farms were divided into two groups on the basis of the number of years of vocational agriculture taken in high school. There were twenty-eight farmers that had two or more years and sixty-three farmers with less than two years of vocational agriculture.

Findings: For the vocational agriculture group there was a range of $24,848 between the lowest average annual net farm income and the highest average annual net farm income for the five year period. This range was $23,057 for the non-vocational agriculture group. The vocational agriculture group exceeded the non-vocational agriculture group in gross income from livestock, total gross income, operator's return for labor and management, and annual increase in net worth. The non-vocational agriculture group exceeded the vocational agriculture group in gross income from crops and miscellaneous income, non-farm net income, and the number of crop acres per farm. In this study the vocational agriculture trained farmers had a $666 higher mean annual net farm income for the five year period reflected in their records than the non-vocational agriculture farmers.
Ringen, Willis Eugene

Occupational Patterns of Farm Boys Who Graduated From Waterville and Blue Rapids High Schools Between the Years 1951 and 1960. Master's Report, 1967, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The study was designed to survey the occupational patterns of farm boys who graduated from the Waterville and Blue Rapids High Schools between the years 1951 and 1960, and to determine the factors influencing their occupational choices.

Method: Data was collected by both the interview and the questionnaire methods. Data was obtained from forty-seven of the fifty-four Waterville graduates and from twenty-five of the thirty Blue Rapids graduates. Thus data was obtained from 85.7 per cent of the total.

Findings: It was found that 38.3 per cent of the Waterville High School graduates were farming and 27.7 per cent were engaged in other agricultural occupations, making a total of 66 per cent in agricultural occupations. It was found that 16 per cent of the Blue Rapids High School graduates were farming and none were in other agricultural occupations. The Waterville High School graduates had been in an average of 2.7 occupations per person and Blue Rapids High School graduates had been in an average of 2.2 occupations per person since graduation from high school. The Waterville High School graduates had been in each occupation an average of 3.5 years and had been engaged in their present occupation an average of 5.7 years. The Blue Rapids High School graduates had been in each occupation an average of 3.4 years and had been in their present occupation an average of 5.5 years. Farming had been an occupation of 63.8 per cent of the Waterville High School graduates at some time since high school graduation and had been an occupation of 44 per cent of the Blue Rapids High School graduates. On the average it took seven to eight years after high school graduation to become established in an occupation. Data indicated that through the years an average of one-half of the Waterville High School graduates were in agricultural occupations while at no time was over one-third of the Blue Rapids High School graduates engaged in agricultural occupations. More Blue Rapids High School graduates went into some post high school education than did Waterville High School graduates (48 per cent compared to 38 per cent) and more Blue Rapids High School graduates earned college degrees (28 per cent as compared to 6.4 per cent) than did Waterville High School graduates. It was found that 30.5 per cent of all those included in the study were in the occupation they had planned to enter while in high school and 37.5 per cent had made no vocational plans while in high school. Of those farming 77.3 per cent were in the occupation they had planned to enter while of those in non-agricultural occupations, 11.1 per cent were in the occupation they had planned to enter.

Purpose: It was the purpose of this study to present a summary of activities that were performed by a number of Future Farmers of America chapters in Kansas in 1963 that made them Gold Emblem chapters. The author was interested in new ideas as the adviser of a FFA chapter.

Method: The Form III of the "Standards for a National Emblem Chapter Award" of each of the sixteen FFA chapters in Kansas was secured via mail or personal contact by the author.

All necessary information for this study was tabulated on a specially prepared form by the author.

Findings: Future Farmers of America chapters annually outline their year's activities in a written program of work. The standards or goals are divided into ten areas: supervised farming, leadership, cooperation, community service, public relations, conduct of meetings, recreation, scholarship, earnings and savings and state and national activities. The accomplishment of these goals may be submitted to the state and national FFA organization for consideration for awards as an outstanding chapter. The top chapters in this competition are awarded a Gold Emblem rating as a national better chapter. The Form III of the national chapter award program applications of sixteen chapters in Kansas was collected. The frequency of the activities as listed on Form III in the ten areas was tabulated. The report was limited to the year 1963. The most frequently mentioned activities were: cooperative buying or selling and/or feeding of livestock, giving awards, approved practices used, conducting demonstrations, cooperating with other organizations, providing leadership training, using official FFA ceremonies, and publicizing FFA activities.
Schneider, Robert M.


Purposes: The purposes of the study were to (1) survey the employment opportunities in non-farm agricultural occupations in the two high school districts, and (2) suggest changes in the educational program to more fully prepare those students for their chosen occupations.

Method: The author interviewed the 27 non-farm agricultural firms in the district.

Findings: The 27 non-farm agricultural firms were divided into four groups according to their business activities. The divisions were:

1. Farm machinery and implement dealers and machine repair shops.
2. Earth contractors for farm services such as terraces, dams, and wells.
3. Elevators and feed mills.
4. Others.

At the time of the interviews, there were 93 men employed by the 27 non-farm agricultural firms. These firms stated that there was a need for 30 additional men for the next two years and for 49 additional men for the next five years after the interview. The pay scale for these non-farm agricultural occupations ran from $1.25 per hour for 40 to 50 hours per week to approximately $150 per week for some mechanics. Some employees were paid on the commission basis. Of the 27 firms, nine had some form of organized training for their employees. The three major items for improvement mentioned by the employers in regards to the educational systems of the high schools were:

1. Improve the spelling ability of the graduates.
2. Improve the writing ability of the graduates.
3. Include more training in the area of economics.
Severance, Harold G.

A Study of the Occupations of Graduates in Agricultural Education Who Did Not Teach Vocational Agriculture. Master's Report, 1966, Kansas State University, Library, Kansas State University, Manhattan.

Purpose: The purpose of this study was to summarize and tabulate the occupational status of Kansas State University agricultural education graduates for the years 1955-1963, who elected not to teach vocational agriculture.

Method: Methods used in the survey included: (1) records check at Kansas State University and the State Board for Vocational Education, (2) Master's Theses, (3) articles from The Agricultural Education Magazine, and (4) a survey of those graduates who elected not to teach.

Findings: Seventy-nine (72.5%) of the questionnaires were returned, but only 67 (61.4%) of the 109 graduates were used in the survey. Forty-two (53.2%) of the 67 respondents were Kansas residents at the time of the survey. The remaining ones lived in 20 other states. Sixty (89.5%) of the 67 respondents were farm reared. Vocational agriculture was taken by 41 (62.1%) of the 67 respondents and 39 (95.0%) of those participated in F.F.A. Of the 67 respondents 44 (67.7%) participated in 4-H Club work. Vocational agricultural instructors influenced 23 (34.8%) of the 67 respondents to pursue the agricultural education curriculum. Twenty-seven (40.3%) of the 67 respondents made their decisions while in college. Returns disclosed 62 different occupations had been pursued by 67 respondents during the span of the study years (1955 through 1963). At the time of the study 35 different occupations were pursued by 67 respondents. According to Kansas State University records, beginning vocational agricultural teachers received a mean salary of $4,754.57 during the study years. Returned questionnaires revealed a mean beginning salary for non-teachers of $4,311.24. Beginning teachers on the average received $433.33 more than non-teachers. At the date of the returned questionnaires, the mean salary of non-teachers was $8,837.19. The records checked at the State Board for Vocational Education revealed a mean salary of $6,357.00 for those graduates still teaching at the time of the study. The figures indicated that non-teachers were receiving $2,480.19 more than those teaching. Forty-four (66.6%) of 66 respondents indicated they were "highly satisfied" or "reasonably well satisfied" with the security of the vocational agricultural teaching profession. Attitudes of 34 (51.5%) of 66 respondents varied from being "somewhat dissatisfied" to being "very dissatisfied" concerning advancement opportunity in the vocational agricultural teaching profession. "Highly satisfied" or "reasonably well satisfied" with present occupation was the attitude of 65 (96.9%) of 66 respondents. Forty-two (68.3%) of 63 respondents indicated they were "highly satisfied" or "reasonably well satisfied" as to the agricultural education curriculum providing helpful instruction towards present occupation. Being "highly satisfied" or "reasonably well satisfied" with salary of present occupation was revealed by 56 (86.2%) of 65 respondents. "Low salary" was indicated by 17 (25.6%) of 64 respondents as being the first ranked reason why they did not teach vocational agriculture. Forty-seven (73.4%) of the respondents listed 16 other reasons first. "Lack of advancement possibilities" was indicated by 14 (25.0%) of 61 respondents as being the second reason why they did not teach vocational agriculture.
Severance, Jr., Robert James

A Study of Written Board Policies with Special Emphasis Directed to Area Vocational-Technical Schools in Kansas. Master's Report, 1966, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: It was the purpose of this study to obtain information relative to the practices of professional and lay administrators in the field of vocational-technical education in developing and using written school board policies, and to develop guidelines relative to the formulation of policies for the Board of Control at the North Central Kansas Area Vocational-Technical School, Beloit, Kansas.

Method: Data for this study was obtained through selected literature in the field of school board policy and vocational-technical education found in the Kansas State University library. Additional data was obtained through a survey of selected individuals from Kansas and from out-of-state to gain opinions relative to board policy. Those individuals included all the directors of area vocational-technical schools in Kansas, all the chairmen of the boards of control for vocational-technical schools in Kansas, and other individuals who were connected with area vocational-technical education in general. A total of 30 questionnaires were sent to those selected individuals with 27 (90%) being returned. Twenty-six (87%) usable returns were employed in the study.

Findings: In assigning the responsibility for developing, organizing and reorganizing the instructional program 17 of the 26 (65%) total respondents felt this was the duty of the director who reported to the board of control. Regarding the providing of means for inservice training for school employees 11 of the 26 (42%) total respondents deemed this to be the director's responsibility only. Fourteen of the 26 (54%) total respondents assigned the responsibility of determining organization and duties of the board of control to the board after receiving recommendations from the director. In determining the responsibility for conducting the election of the board officers and clerk, 16 of the 26 (62%) total respondents assigned this responsibility to the board of control only. In essence, the study revealed the means whereby a school district, more specifically a vocational-technical school, could establish lines of responsibility in order that optimum efficiency of operation might be achieved.
SITDHICHAI, YANYONG


Purpose: The purpose of this study was to set up an agricultural economics curriculum for the four Agricultural Technical Institutes in Thailand.

Method: Procedures used to collect, present and interpret data included the use of library research, questionnaires, and interviews. Questionnaires were sent to specialists both Thais and some Americans in Thailand and in the United States.

Findings: The findings of this study indicated that the average number (mean) of courses in agricultural economics suggested to propose was 8.8 (9). The largest frequency or mode was 10, and the median had the value 9. For the courses in general education, the mean or average number of courses was 6.9 (7). The mode or largest frequency was 8, and the median centered the number of classes at 8.

It was the conclusion of this study that a curriculum in agricultural economics for Agricultural Technical Institutes in Thailand should include nine courses in agricultural economics and eight courses in general education. Those nine courses in agricultural economics should be the courses which had the top nine frequencies of all courses as follows:

1. Farm Management
2. Principles of Agricultural Marketing
3. Agricultural Finance
4. Agricultural Prices
5. Farm Organization
6. Farm Record and Analysis
7. Principles of Cooperation
8. Land Economics
9. Agricultural Statistics

Eight courses in general education should be the courses which the top eight frequencies of all courses as follows:

1. Rural Sociology
2. English Language
3. Extension Organization and Policies
4. Human Relations
5. Community Organization and Leadership
6. Thai Language
7. Methods of Instruction
8. General Knowledge or Physical Education or Mental Hygiene

Students majoring in Agricultural Economics must also select a minor in Animal Science, Plant Science, or Farm Mechanics of at least four courses.

**Purposes:** To determine what money raising activities were carried on in the Northwest Kansas District, which were most often successful, and which ones were unsuccessful and why.

**Method:** Data was collected by personally interviewing 100 per cent of the thirty-three vocational agriculture instructors in the Northwest Kansas District on how they financed their chapter activities. An interview check list was used in collecting this data.

**Findings:** The vocational agriculture instructor in Northwest Kansas District has taught school an average of 10.72 years. He has an average of thirty-four boys in his department earning an average of $561.15 a year. Teachers experience seems to be related to the amount of chapter income. The teachers in the chapters with above average income have taught there 44 per cent longer than teachers in the below average income chapters. The chapters with above average income have an average of four money raising activities. Their most popular ones are tree nursery, carnival, wrestling match, concession stand, light construction and farm work, and school farm. The most unsuccessful money raising activities could all be grouped under selling. Farm related and entertainment activities made up the remainder of unsuccessful money raising activities.

Purposes: To determine (1) how the vocational agricultural teachers organized the Farm Mechanics course into instructional areas; (2) how many instructional areas there were in Farm Mechanics; (3) why the vocational agriculture teachers selected certain courses; (4) the methods that vocational agriculture teachers used in determining the lessons to teach in each instructional area in Farm Mechanics; and (5) the satisfaction of the vocational agriculture students.

Method: Interviews were conducted with fourteen vocational agriculture teachers in Kansas high schools and fifty-six students enrolled in the vocational agriculture departments. A check list was used based on factors considered the problems in Farm Mechanics.

Findings: There were five major instructional areas taught in farm mechanics: farm shopwork, farm power and machinery, farm buildings and conveniences, farm electrification, and soil and water management. The total number of periods for teaching farm mechanics in the high schools where the teachers and students were interviewed was 277 periods for four academic years. Of this: farm shopwork was 80 periods, farm power and machinery 82 periods, farm buildings and conveniences 40 periods, farm electrification 46 periods, and soil and water management 29 periods. The teachers interviewed wanted to increase teaching time in the areas of farm shopwork, farm electrification, farm power and machinery, and soil and water management, while they wanted to decrease time in farm buildings and convenience. Ninety-five per cent of the vocational agriculture students had improvement programs in farm mechanics. Sixty-six per cent of the vocational agriculture students had shops at their homes. Most of the vocational agriculture students also completed projects in the school shop.
Trichler, Norman D.

A Survey and Evaluation of Off Farm Agricultural Job Opportunities in Salina, Kansas, Master’s Report, 1965, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: This creative research was proposed to determine the needs of employers for trained personnel in the field of off farm agriculture in the Salina School District of Saline County, Kansas.

Method: Information in this study was obtained through a community survey questionnaire with a follow-up interview over the telephone.

Findings: Retailing was the predominant type of business with services being a close second. Those surveyed showed a correlation between retail and service types of businesses. Regarding the question "What is the product, service function or consumer good of the business?" most businesses indicated that service was their end product and next most frequent was "Agriculture machinery." Feed handling-storage-milling was third in number of businesses. Levels of work were divided into categories that correspond to that of the Dictionary of Occupational Titles. There were 1,957 jobs listed in the five following levels: professional and managerial, clerical and sales, skilled laborers, semi-skilled laborers and unskilled laborers. Employers were asked to estimate the number of new employees anticipated due to business growth and employee turnover in the next five years (1964-1969). From this estimate, 89.3 per cent will need 1 to 15 new employees and 4.8 per cent will need 40 to 55 new employees. Over half of the employers employ 50-100 per cent of their employees with an agriculture background. A study of the interest of the employers in hiring part-time workers taking vocational education programs in the area of their need showed 39 per cent would be interested and 26 per cent undecided. From this data the need for more skilled, professional and managerial employees for the present and the future was clearly proven. In order to provide salable skills and those understandings and attitudes that make the worker an intelligent and productive participant in economic life, the school and the agricultural businesses must work together. Need for students to have the opportunity to apply classroom and laboratory learnings under actual working conditions was expressed by the fact that 39 per cent of the employers desired such a program. In essence this study was based upon employers opinions of their needs in employees, indicating what has been happening in the past, what the present situation reveals, and on what will be likely to happen in the future.
Van Cleave, Harold Buford

A Study of Judging Contests in the South Central District of Kansas. Master's Report, 1965, Kansas State University. Library, Kansas State University, Manhattan.

**Purpose:** The purpose of this study was to determine the attitudes of vocational agriculture teachers in South Central Kansas and of the college specialists who were familiar with the judging contests toward activities in the district judging contests. In addition the purpose was to compare their attitudes with vocational agriculture teachers in Finley's report on judging contests in Kansas in 1959. Also, this study was made to see if contests could be improved.

**Method:** The information in this study was obtained through interviews with eighteen vocational agriculture teachers in the South Central Kansas District and with seven specialists at Kansas State University.

**Findings:** A study with teachers concerning the importance of the four contests in their teaching program indicated livestock ranked first; agronomy, second; and dairy, third; with poultry fourth. Almost fifty per cent of the teachers spent no time with freshmen in preparation for district contests while one-sixth set aside ten hours, and the majority took less than ten hours. Teachers spent varied number of hours from none to more than fourteen hours on sophomores. The junior class spent the most time for instruction in judging with the majority of teachers taking twelve hours and one-fourth of them more than fourteen hours. Seniors received slightly less instruction time than juniors. Most of the teachers train all students in class and select the team on the basis of performance. A few of the teachers ask for contest team volunteers and select a team on the basis of performance. In the area of contest improvement several teachers thought the livestock classes could be made more placeable. In the crops contest several teachers wanted more demonstrations on how to identify plants and seeds. In dairy several teachers wanted better quality dairy animals used in the contest. If students were used to hold the cattle, they should be rewarded with the better holders getting an award. In poultry judging, the only major suggestion felt worthwhile by the teachers was a demonstration on modern breeds and hybrids. Instructors and specialists indicated that contests should be practical and revised as our agricultural scene changes from year to year.
Wallace, James Howard

Why Teachers of Vocational Agriculture in Kansas Leave the Field. Master's Report, 1967, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: To determine why teachers of vocational agriculture leave the field.

Method: Record check at KSU and the State Board for Vocational Education, interviews with faculty at KSU, and development of a questionnaire which was mailed to 56 former teachers of vocational agriculture.

Findings: The analysis of data is based on the responses of 52 (91.9 per cent) of the former teachers of vocational agriculture. Forty-two (84.5 per cent) of the respondents were Kansas residents at the time of the study. Five lived in four states other than Kansas and three in foreign countries. Twenty (21.1 per cent) of the occupants were associated with the field of education; 10 (14.9 per cent) were connected to education at college and university level. Extension ranked third. Forty-three occupations were pursued by 52 respondents; education and extension occupied 51.3 per cent of the former teachers. Employers contacted 26 (51.3 per cent) of the 47 respondents in first position after teaching. Fifty per cent of the teachers had no plans on tenure when entering the profession, but seven who planned to make teaching a career ended teaching in five years or less. Administrators were not a cause of respondents leaving the profession in 85 per cent of the cases. Eighteen (31.4 per cent) of the teachers who left the profession had a master's degree and one-half of those had an average of 13.5 graduate hours. Superior lesson preparation was considered "very essential" or essential by 49 (94.2 per cent) of the 52 respondents, while discipline problems were "no factor in leaving" as shown by 40 (31.6 per cent). Over 80 per cent of the former vocational agriculture teachers were pleased with their training in agricultural education at KSU, and would advise young men to use it as a "stepping stone." The average annual salary of the 33 respondents was $7,736.75 at the time of the study compared to $6,707.00 for the 186 in-service vocational agriculture teachers in Kansas for the 1965-66 school year. Twenty-four (46.1 per cent) of the 52 respondents indicated they were "very dissatisfied" or "somewhat dissatisfied" with opportunities for advancement in vocational agriculture teaching profession. One hundred per cent of the respondents were "highly satisfied" or "reasonably well satisfied" with their present occupations. Eighty-eight per cent of the 52 respondents indicated they were "highly satisfied" or "reasonably well satisfied" as to the agricultural education curriculum providing helpful instruction towards present occupation. The 52 former teachers indicated by a data table that their first reason for leaving the profession was "limited opportunity for advancement;" second, "salary not commensurate with work;" and third, "too many extra-curricular activities." Twenty-six (50.0 per cent) of the former teachers indicated that they would consider returning to the profession, followed by qualifying statements.
Whaples, Gene Child

The Role of the County Club Agent in Kansas. Master's Report, 1965, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The purpose of this study was to identify and define the role of the Kansas County Club Agent.

Method: Role theory was used as the theoretical basis for the study. Data were collected using a structured mail questionnaire. A total population was used. Percentage of responses from respondent groups ranged from 67 to 100 per cent. Respondents' reactions to the fourteen selected functions were ranked by the use of mean weighted scores. Consensus was measured using a coefficient of rank correlation, a coefficient of concordance, and percentage distribution.

Findings: (1) The total group of respondents ranked as the three functions that "should be" receiving the highest emphasis Training leaders, Developing and maintaining good public relations, and Keeping up to date in subject matter and teaching methods. Relatively high consensus existed between all position groups as to both "should be" and "currently being." Consensus varied between position groups. (2) Courses in Extension Education, experience, and age of County Club Agent did not seem to affect the ranking of the fourteen selected functions. Those with induction training placed more emphasis on planning programs. Age, sex, education, township group represented, and years of service on the County Agricultural Extension Council seemed to be important factors in the ranking of some functions by executive board members. Education appeared to be the most important factor influencing the ranking of functions by the executive board members.
Purpose: The purpose of this study was to determine the teaching methods and techniques employed by teachers in the teaching of farmer cooperatives in vocational agriculture.

Method: The information for this study was obtained through a review of selected literature and a questionnaire to thirty-two vocational agriculture teachers in Kansas.

Findings: The average amount of time devoted to the teaching of farmer cooperatives in vocational agriculture was eight hours in the senior year, seven hours in the junior year, six hours in the sophomore year and three hours in the freshman year. Pamphlets published by farmer cooperatives were used by ninety-seven per cent of the teachers as the basic reference material in the teaching of farmer cooperatives. Motion pictures were the most used visual aid, being employed by sixty-three per cent of the teachers. Field trips were employed by eighty-seven per cent of the population to impart useful business training to future cooperatives were used as a teaching method by seventy-five per cent of the teachers. Supervised study and class discussion was used by eighty-eight per cent of the teachers in the teaching of farmer cooperatives. When resource people were used, seventy-two per cent of them came from local farmer cooperatives. Competitive activities sponsored by the Kansas Cooperative Council were used as a motivation tool in the teaching of farmer cooperatives. One hundred per cent of the populations of this study participated in both the Cooperative Quiz Contest and the Cooperative Activity Contest. Fifty-three per cent of the population of this study had at least one farmer cooperative organization in their community. Fifty per cent of the cooperatives sponsored tours of local cooperative facilities while fifty-nine per cent aided the school in administering the cooperative quiz.
Bevan, Betty Anne Wheat

Emphasis on Problem Solving in a Marriage and Family Relationship Unit at Twelfth Grade Level. Master's Report, 1964, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The purposes in this study were: (1) To develop a unit in marriage and family living based on identified needs of a group of twelfth grade pupils, (2) To provide learning experiences that allowed pupils to develop problem solving skills, (3) To evaluate learning results.

Method: These purposes were carried out through: (1) Careful investigation of pupil needs in the family living area and the more specific marriage and family area, plus investigation of the individual needs of the twelfth grade pupils in the study, (2) Development of a unit entitled "When You Marry" planned and taught with emphasis on problem solving as the means through which learning occurred, (3) Evaluation of the quality of this learning by an available standardized test and by a pencil and paper test developed by the investigator. In this study the investigator and the teacher of the unit are the same individual. This study was based on and patterned after one completed by Peterson in 1962 at the University of Wisconsin with the author's permission.

Findings: There was evidence of pupil growth toward objectives of the unit. Understandings evidenced by pupils and their ability to use the processes of problem solving dealing with marriage situations provided evidence of pupil growth toward attainment of unit objectives. Responses to the MSA and to daily work provided evidence of increased ability to think critically in problem situations included in the unit and in the test. Test-retest results on the MSA indicated pupil gain in ability to use the processes of problem solving. As measured by the test, pupils gained in knowledge of terms, recognition of problems, ability to analyze causes of situations and ability to distinguish pertinent questions in problem situations. Pupils expressed awareness of importance of the unit for their development and growth. Observations of pupil behaviors, test results, and daily work provided evidence that pupils were more interested and attentive during this unit than during previous units. The teacher of the unit achieved a degree of satisfaction in her teaching not felt before. The development and teaching of this unit and evaluation of learning results provided a stimulating learning experience for the teacher. Test results, pupil responses and daily work attested to pupil growth, thus providing satisfaction for the teacher. A small decrease in mean score was noted on the "Watson-Glaser Critical Thinking Appraisal, Form AM."
Bhave, Asha Manohar

A Survey Course in Home Science for Women Agriculture Students in an Indian University. Master's Report, 1963, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The purpose of this study was to investigate basic principles of curriculum development and to gain skill in applying these principles to the plan of a survey course in home science based on the needs of women agriculture students at the Osmania University in India.

Method: Current teaching resources and techniques appropriate for home science (home economics) classes were surveyed. Selection of resources and techniques was made on the basis of their application to present-day conditions in India. Classroom observations in college home economics classes at Kansas State University, a survey of library sources related to the field, and course work in education and home economics were the primary means employed to gather necessary information. Discussions with home economics subject matter specialists helped to guide the writer during development of the course.

Findings: The survey course included broad objectives, units of study to attain these objectives, and a detailed plan for one unit, "Preparing for the Role of Homemaker and Mother." This unit plan included unit objectives, learning experiences, teaching materials and situations for evaluation of student learning, a list of guide questions, a test to be administered prior to and following the unit, and a questionnaire for evaluation of the course by students. It was recommended that educational needs of students and families of India in the field of home science be determined prior to development of courses of study for these students and that curriculums in home science be planned, taught, and evaluated democratically. Application of the democratic process to curriculum planning and implementation may assist Indian students in the attainment of goals of democracy and independence being sought today.
Biesemier, Thelma Minnie

A Home Economics Curriculum Study in the Field of Clothing for an Area Vocational-Technical School in Kansas. Master's Report, 1965, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The purposes of this study were (1) to investigate and compile selected literature in the field of vocational education, employment, and curriculum development and implementation; (2) to relate this body of knowledge to curriculum development for home economics-related occupations; and (3) to develop a portion of the clothing curriculum for an area vocational-technical school in Kansas, based on local and state needs.

Method: The investigator identified, through means of questionnaires, the personal traits and skills considered necessary to acquire success in employment related to clothing, specifically in the areas of new construction, alteration and repair. This information was obtained from seamstresses, alteration personnel, department store managers and owners, dry-cleaning-laundry owners and representatives from tailoring shops in Winfield, Kansas.

Findings: Literature relating to vocational education, employment, and curriculum development, together with the findings from these questionnaires, provided a basis for planning a course of study in clothing related to wage-earning occupations. This course, planned for one year, was divided into eleven units. They included an orientation to opportunities in the world of work related to clothing; employer-employee relationships; the development of personal traits; the importance of personal appearance; experiences in the area of new construction and alteration; making gift items; and skills needed for personnel in dry-cleaning-laundering occupations. An eight-week period of on-the-job training was included at the close of the second semester to give pupils experience in applying knowledge to the world of work. The investigator recommended that further research be conducted to develop additional aspects of the clothing curriculum. There was also a recognized need for investigation of employment possibilities and for the development of courses of study in areas of foods, housing and home furnishings, home management, child care, and health related to wage-earning occupations.
KAN 000 039

Carnahan, Sara Stockwell


Purpose: The purpose of this study was to identify and organize concepts and related generalizations for learning in a family living unit for an eleventh or twelfth grade class of girls. Appropriate learning experiences were selected to guide pupils to arrive at generalizations.

Method: The family living unit selected was "Preparation for Marriage." A review of literature helped the writer define concepts and generalizations, to emphasize the value and use of concepts and generalizations in the learning process, and to support the view that Family Life Education has a place in the secondary school curriculum. Four main ideas or concepts were identified: (1) Building a wholesome and mature personality, (2) Choosing a marriage partner, (3) Responsibilities involved in marriage, and (4) Wedding plans. A two-dimensional chart was used to develop objectives which were stated as behavioral goals.

Findings: Lesson problems were identified as follows: (1) Why is preparation for marriage important? (2) How may I build a worthwhile and productive life? (3) How does dating form a background for the selection of a marriage partner? (4) Why do people marry or not marry? (5) What are the factors to consider in making a wise choice of a marriage partner? (6) Why is there an engagement period? (7) What are the legal requirements for marriage? (8) How can I prepare myself to meet the responsibilities involved in marriage? (9) What determines the kind of wedding a couple should choose and plan? (10) How much does it cost to establish a home? (11) How can a family determine their responsibility to the community? The six weeks unit plan included illustrative desired behaviors, generalizations, learning experiences, situations for evaluation, references, and suggested bulletin board ideas. In order to select appropriate learning experiences, it was necessary to review textbooks, reference books, and home economics curriculum guides from several states. Daily lesson plans were developed. A table of specifications was used in planning the final paper and pencil test, which was prepared to assist in evaluating pupils' attainment of behavioral objectives of the unit.
A Survey of Employment Patterns and Interests of a Selected Group of Young Homemakers
Master's Report, 1965, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The purposes of this study were: (1) to identify types of employment engaged in by respondents and factors affecting choice of employment, (2) to identify stated reasons for working and satisfactions gained as a result of employment, (3) to identify contributions of high school home economics classes to preparation for employment, and (4) to determine types of home economics-related employment respondents would enter if trained.

Method: The investigator reviewed literature on the employment of women and the role of education for the world of work. An interview schedule was developed by the investigator and administered to twenty-six young homemakers to identify their employment history during their high school years, post-high school years, and post-marriage years and to identify their interest in training for various home economics-related employment.

Findings: Respondents reported that the types of employment engaged in during high school were not generally engaged in after high school or following marriage. Generally, the same types of employment were engaged in prior to and after marriage. Respondents indicated that major satisfactions gained while working were from associations with people and the work experience rather than from the money earned. They indicated that home economics learnings had helped them most with jobs held in high school years. Ninety-two per cent of the young homemakers checked "yes" when asked to indicate if they would take the opportunity to learn a saleable skill if training at little or no cost to them would be offered in their community. The two areas where these homemakers indicated the greatest amount of interest in home economics-related employment possibilities were (1) child care services and (2) home furnishings and decoration services. The following recommendations may provide help to home economics teachers as they plan curriculum content and wage-earning programs. (1) Child care units in high school could be taught to provide information of immediate use to high school youth to obtain employment during high school, to prepare young girls for motherhood, and to relate information on child care and development to employment possibilities in addition to baby sitting. (2) Programs in adult education might be developed to prepare young wives for types of employment in child care and home furnishings and decorations. (3) Consideration should be given to titles assigned to home economics-related occupations. (4) Further research may be needed to identify relationships between job titles and employment interests. (5) A similar study may be appropriate with a larger group or in another community.
Durner, Rosetta Snyder

Concepts About Home Economics Held by Mothers of Ninth-Grade Homemaking Pupils with Implications for a Junior High School Public Relations Program. Master's Report, 1965, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The purposes of this study were: (1) to identify concepts of home economics held by mothers whose ninth-grade daughters were currently enrolled in the homemaking program of Hadley Junior High School, Wichita, Kansas, and areas of learning these mothers felt should be included in the homemaking program; (2) to compare these concepts with present curricula and philosophy; and (3) to recommend procedures for building an effective public relations program for Hadley Junior High School.

Method: An opinionaire was sent to all of the mothers whose ninth-grade daughters were currently enrolled in the homemaking program of Hadley Junior High School. The opinionaire was preceded by a data sheet which dealt with information about the respondent and her family.

Findings: Responses indicated awareness that most homemaking class time is spent on the areas of foods and clothing. Mothers approved of this time allotment, as long as the other areas of home economics were taught at the same time and integrated with the areas of foods and clothing. They also felt that: homemaking courses should be elective for boys and required for girls; homemaking classes are for pupils of all ability levels; homemaking classes prepare girls for taking care of a family and for working outside the home; homemaking classes can be of great value to the pupil who may drop out of school; and home practice is necessary if the homemaking pupil is to benefit the most from her school experiences. The scope and content of the homemaking program cannot be changed until the Wichita curriculum guide is revised. However, recommendations for enriching the curriculum included integrating other areas of home economics with the areas of foods and clothing and emphasizing that this is being done, providing opportunities in homemaking for boys, grouping pupils in the heterogeneous classroom situation into smaller groups of pupils of similar abilities, telling the opportunities which training in the field of home economics offers, and encouraging home practice of school learnings. It appears that the most important feature of effective public relations depends upon personal contact of the homemaking teacher with parents and others in the community. Therefore, the homemaking teachers of Hadley need to find opportunities for personal contacts, both direct and indirect, with the public. In each contact, they will want to convince their audience that their field is one which is creative and requires decision-making, is important and essential, and is up-to-date.
Eshbaugh, Phyllis Janet Jacobson


**Purpose:** The purposes of this study were (1) to determine the types of employment engaged in by graduates of the home economics education program; (2) to ascertain each graduate's feelings about adequacy of preparation for teaching in relation to professional education and home economics subject matter; and (3) to make recommendations for changes deemed desirable in relation to home economics and professional education experiences, including student teaching.

**Method:** Information was gathered by means of a questionnaire from ninety-four graduates of the home economics teacher education program at Kansas State University, all of whom had been graduated between January, 1963, and 1964.

**Findings:** Fifty-three respondents, or fifty-six per cent, had taught and/or were teaching home economics at the time of the study. A variety of types of work was reported by the subjects; however, seventy-seven per cent were employed in professional level positions. Their student teaching experience was considered by respondents to be of the most value in preparing them to teach home economics. In general, respondents felt that course work in the psychology and principles of education had been of little value in preparing them for teaching home economics. Courses dealing with curriculum planning and methods of teaching home economics were reported as providing valuable preparation. Of the seven areas of home economics included in high school programs, respondents felt most adequately prepared for teaching in the foods and nutrition area and least adequately prepared in the housing and home furnishing area. Assuming the teacher role and understanding its philosophy was the competence of beginning teachers for which respondents reported the most adequate feelings of preparation. They felt least adequately prepared and had fewer responsibilities for program implementation. Two thirds of the subjects reported that five weeks of student teaching was an adequate length and one third felt it was too short. In general, respondents felt student teaching was a worthwhile, pleasant experience from which valuable learnings were obtained. Eighty-three per cent indicated they had received adequate pre-service preparation. Major recommendations suggested by the investigator included revising or enriching professional education courses to make them more pertinent and meaningful to students as potential teachers; increasing the number of contact hours in courses dealing with curriculum and methods in home economics and introducing these courses before the senior year; and extending the length of the student teaching experience to more than five weeks, with the possibility of choice by students in relation to the type of center to which they would be assigned.
Huey, Betty Frances

A Study of the Short-Answer Objectively-Scored Test as an Evaluation Instrument in Tenth Grade Foods. Master's Report, 1964, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The purpose of this study was to develop a series of short-answer, objectively-scored unit tests for a high school course in foods.

Method: The steps in planning the tests which were used included, first, outlining the subject matter; second, selection of general types of outcomes to be measured; third, defining specific objectives; fourth, designing a brief essay type of test to indicate scope of content of the units and to serve as a study guide for students; fifth, item writing; sixth, administering tests to a sample group; and, seventh, analyzing results and modifying and revising items. The tests were given to a small group and analyzed in two ways, for item difficulty and for item discriminative power. Success was determined in terms of the total number who answered each item correctly, and discrimination in terms of high-low difference. Standards for acceptable range of success and discrimination were those of Paul Diederich and the Educational Teaching Service in the Evaluation and Advisory Service Series No. 5, which suggested 90 per cent and 30 per cent for range of success and a minimum acceptable high-low difference as 10 per cent.

Findings: The tests did not measure as well to those standards, but because the sample group was small, it was felt that the results of the item analysis had significance for revising items and improving teaching. A student evaluation of the tests was used which was felt to be especially useful in pointing out areas of misunderstanding. It was felt that the greatest shortcoming of the tests in general was the scarcity of items which really tested application of general principles to new situations. The instruments in fact, were not polished in many respects but it was concluded that a variety of instruments can be used to evaluate to some degree the attainment of representative goals in the areas of home economics and that there is a challenge in planning a practical and effective testing program.
Hunziger, Maxine Lovell

An Exploratory Study to Identify Concepts and Determine Concept Attainment in a Home Economics Education Course. Master's Report, 1964, Kansas State University. Library, Kansas State University, Manhattan.

**Purpose:** The purposes in this study were (1) to identify basic concepts for a beginning course in home economics education and (2) to assess students' awareness of and ability to use basic concepts and related generalizations during and immediately following the student teaching experience.

**Method:** The investigator identified the major concepts of the Methods of Teaching Home Economics course through observations in the class. Student teachers' attainment of concepts and related generalizations was evaluated with a paper and pencil test, observation of students in the student teaching experience, and in assignments completed by students.

**Findings:** The major concepts identified in the Methods of Teaching Home Economics course appeared to be attained by students in decreasing order as follows: (1) Effective and meaningful planning helps the teacher as she guides pupils toward learning objectives; (2) Student teaching provides an opportunity for the student teacher to begin to assume the role and responsibilities of a classroom teacher; (3) Programs of learning are planned to meet needs of specific groups of pupils having a variety of individual differences; and (4) A variety of means may be used to evaluate pupil learnings effectively. It was recommended that teachers of methods courses in home economics and secondary teachers of home economics might identify basic concepts and make concept attainment a desired goal of learning. Increased opportunity to guide supervising teachers in their roles in the student teaching experience would probably increase their proficiency as directors of learning. The professional education curriculum might be arranged to include further learnings in measurement and evaluation. Students and teachers who are encouraged to continue their education would be likely to utilize self-evaluation effectively, be exposed to trends and new developments in subject matter and teaching techniques, and new knowledge relating to the learning process. Further research in means of evaluation of concept attainment and refining of instruments to measure concept attainment appears to be desirable.
Prall, Ruth Marie Briggs


Purpose: The purposes of this study were (1) to identify management problems of homemakers employed outside the home and (2) to develop learning experiences for twelfth-grade girls to enable them to develop home management understandings and skills needed for the dual role of homemaker and wage earner.

Method: Major problem areas of employed homemakers were identified for inclusion in the home management unit. Area concepts and behavioral objectives were written for each problem area. Basic generalizations and concepts were selected from the U. S. Office of Education publication, "Curriculum Resource Material: Conceptual Framework and Generalizations in Home Economics," to use as a basis in developing the learning experiences in each problem area.

Findings: The focal point of planning the learning experiences was the social-family group approach. The sequence of study in the problem areas was arranged to enable twelfth-grade girls to gain an understanding of the basic concepts of management and then develop skill in using the concepts in each succeeding area. The learning experiences could be incorporated as part of a specialized course introducing twelfth-grade girls to the world of work or as part of a twelfth-grade non-specialized home economics course. In this study, the application of management concepts was limited to selected problem areas of the employed homemaker. It was recommended that other problem areas be identified. Two such problem areas could be care and development of children of the employed homemaker and providing for recreation and leisure time. It was further recommended that plans be made for teaching and evaluating the unit and for making a follow-up study to determine the value to the young homemakers in the dual role.
Rhodes, Grace Elizabeth

A Family Living Course for a Coeducational Home Economics Class in Central College High School. Master's Report, 1964, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The purposes of this study were: (1) to develop content for a family living course to be taught in a coeducational class in Central College High School, and (2) to use the prepared material in teaching this course and evaluating learning.

Method: Behavioral goals, which identified both the kind of behavior to be developed and the area of life in which the behavior was to operate, were identified. Learning experiences were selected to guide pupils toward attainment of concepts that would bring the desired behavior change. A variety of teaching methods was used to develop and maintain a high interest level. Several means of evaluation were used to recognize attainment of behavioral goals by pupils.

Findings: It is recommended that coeducational family living classes be made available to all high school seniors, and that all pupils be encouraged to enroll. It is suggested that consideration be given to community mores, school situation, and pupil needs as background for planning such a course. It is further recommended that a minimum of one year be allotted for this class and that teaching methods be employed that will provide a framework for continued independent learning by pupils. To the extent that pupils are prepared successfully for lifetime learning, such a course has been successful in helping to prepare them for living in a world of change.
Ross, Dora Charlottie

Expressed Problems of a Selected Group of Young Homemakers with Implications for a High School Home Economics Program. Master's Report, 1964, Kansas State University, Library, Kansas State University, Manhattan.

Purpose: It was the purpose in this study (1) to discover the number of young marriages among a selected group of Delia High School graduates; (2) to identify the problem areas in relation to homemaking among the young married subjects; and (3) to suggest appropriate revisions of present offerings in the high school home economics program at Delia High School.

Method: The information and facts used in this study were obtained from library sources, school records, and a questionnaire adapted by the investigator from one developed by Schubert in a study completed at the University of Wisconsin in 1959 to identify problems and needs of young homemakers. The setting chosen for this study was the rural community of Delia, Kansas. The participating group consisted of seven young homemakers who had graduated from Delia High School between the years of 1957-1963. These young women were under twenty-six years of age, had been married from one to five years, and had a total of thirteen children.

Findings: The young women reported they had ample modern homemaking facilities to perform their homemaking tasks. Those mentioned most often were range, washing machine, iron, television, clothes dryer, and sewing machine. The most desired device was a vacuum cleaner. Having a small baby was listed most often as the home responsibility that limited the young homemaker in participating both in community activities and recreational and leisure time activities. Cooking was listed the greatest number of times as the home activity they most enjoyed. Ironing was listed as the least enjoyed activity. The most frequent difficulty associated with homemaking was expressed in food preparation, housekeeping, and clothing. Respondents indicated that their mothers had been a chief source of ideas and techniques on how to manage a home. When asked what the school could have done to prepare them better for their homemaking responsibilities, responses clustered in three areas: (1) changes of emphasis in homemaking courses; (2) content to be included; (3) enrollment in homemaking courses. Respondents recognized a need for training in all areas of homemaking. More work was suggested in the areas of management, foods, and safety. Respondents indicated that their learnings in home economics classes had been helpful and stressed their conviction that all girls should study home economics during their high school years.
Clothing Construction Concept and Skill Development at Three Levels in Ninth Grade Homemaking. Master's Report, 1967, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: This study was made (1) to identify major concepts in the area of clothing construction at three levels of difficulty at ninth grade, (2) to identify three groups of ninth grade pupils by clothing construction skill, and (3) to plan learning experiences to develop selected clothing construction concepts at three levels for ninth grade pupils.

Method: Three developmental levels were identified for clothing construction skill and/or ability of pupils in a heterogenously grouped ninth grade homemaking class. A short performance pretest, "How Well Do You Sew?", consisting of five construction processes of varying degrees of difficulty, was devised. Experienced clothing construction teachers analyzed and rated these processes in terms of differentiating among pupils on the basis of previous experience and skill development. Standards for the construction processes were determined and three levels of skill performance established as the basis for judging the problems in the pretest.

Findings: The pretest was administered to forty-two pupils in two ninth grade classes. Findings from exploratory use indicated that it was possible to group ninth grade homemaking pupils at three levels of skill development. Learning experiences were developed for six selected concepts to exemplify planning for classes where three groups of pupils were identified by developmental levels of skills. Application of current philosophy in curriculum planning and development of plans usable for teaching ninth grade clothing construction at Robinson Junior High School, Wichita, Kansas, were considered when developing the learning experiences. Major conclusions drawn from the study were: (1) Planning for and teaching for the differentiated development of specific concepts for three groups within a class may be more feasible educationally and more practical than planning for development of different concepts at different times with individuals. (2) There may be need for more structuring of subject matter content in clothing construction textbooks and manuals, as well as in classroom teaching, in terms of concepts and generalizations. Because of the limited nature of this study the following recommendations were made: (1) Further use of the pretest be made under controlled conditions and with a larger number of subjects. (2) Validity and reliability of the pretest be determined. (3) The learning experiences developed for the selected concepts in clothing construction for three groups of ninth grade pupils be used and evaluated. (4) The procedures for determining groupings and the methods used for identifying concepts and for planning learning experiences be used further in the area of clothing construction and in other subject matter areas in home economics.
Shipman, Sarah Ann


**Purpose:** The purposes of this study were (1) to develop a unit based on art principles using the problem-solving approach and (2) to determine the learning that occurred as a result of teaching this unit to a group of Home Economics I pupils.

**Method:** A review was made of literature concerning learning through problem-solving and art as a part of the home economics program. Two of the twelve competencies Peterson developed as ultimate objectives for the total secondary home economics program were developed into ultimate objectives for the unit in this study. They were "Applying critical thinking skills to problems of personal and family living," and "Learning to appreciate beauty and its contributions to daily living." Behaviors were identified that would lead to development of appreciation for, and ability to use art principles in daily living. These behaviors were structured into problem situations and a unit "Beauty as It Affects Individuals and Family." was developed around these problem situations for a Home Economics I class. Generalizations to be recognized by pupils and suggested pupil-learning experiences were identified for problems in the unit. Illustrative desired behaviors and situations for evaluation were recognized for each phase of the unit. A unit test developed by the investigator was administered before and after the unit to determine the nature and amount of learning in identifying and solving problems and in relating art principles from a variety of subject-matter situations to many areas of living. The *Watson-Glaser Critical Thinking Appraisal, Form Ym* was administered before and after the unit to measure growth in certain aspects of critical-thinking ability of pupils. Other means of evaluation included the investigator’s analysis of written and work assignments completed by pupils during unit, observation of pupils in the learning situation, and evaluations made by pupils at the close of the unit.

**Findings:** There was evidence of pupil growth toward objectives of the unit. Test results indicated that learning occurred in identifying and solving problems and in relating art principles from a variety of subject-matter situations to many areas of living. A small increase in group mean score was noted on the *Watson-Glaser Critical Thinking Appraisal, Form Ym.*
Purpose: The purposes of this study were (1) to plan and implement a pilot course in home management for women patients receiving treatment in the C. F. Menninger Memorial Hospital, (2) to assess the success of the pilot course and need for changes, and (3) to develop a more comprehensive course of study in the management of the home.

Method: A home management pilot course of six weeks duration was planned and taught to six selected participants, ranging in ages from sixteen to sixty. The pilot course included a unit on foods and nutrition taught by the consultant, and units on general home care, clothing care, and personal finance taught by staff members. Classes were held in the afternoons, Monday through Friday, for an hour and a half, except for the foods and nutrition classes which met for two hours. At the conclusion of the pilot course assessment was made by the staff instructors, the participants, the adjunctive therapist assigned to the activity, and by the consultant.

Findings: The results of the questionnaire administered to the instructors indicated that varying degrees of satisfaction were received from working with participants. Interest was expressed in participating again; however, involvement in their own work might prevent considering them as regular instructors for the proposed course. The results of the questionnaire administered to the six participants indicated that there were beneficial learnings in each unit taught and the interest level remained high throughout the greater portion of the time. There was an expressed preference for one person to conduct the entire course. Suggestions were made for specific improvements in each unit. Observations made by the therapist and consultant indicated that the participants showed interest in and received satisfaction from the activity and that therapy, illness, and appointments kept participants from attending. The therapist felt that a trained instructor in home economics was needed for the activity. The consultant observed the patients to be tolerant of each other and that age differences were not significant to group functioning. The consultant, in using the pilot course outline, found that major learnings and methods for developing them were not clearly identified and that a more complete guide would be necessary for another person to use in teaching. Conclusions were drawn from the findings of the assessment of the pilot course and recommendations made for developing and for implementing a more comprehensive course. A more comprehensive course "Management for the Home" was developed following recommendations made from the assessment of the pilot course.
Avery, Geraldine Lancaster


**Purpose:** To determine criteria used by eleventh and twelfth grade boys and girls for making purchases and to determine amount of money spent on clothes and cosmetics.

**Method:** Data for the study was collected by the use of a questionnaire and checklist. The questionnaire consisted of questions concerning clothing and cosmetic buying practices. The checklist was used to record money spent for clothing and cosmetics at three-week intervals for three months. Eighty-five junior and senior high school pupils at Spring Hill, Kansas participated in the study.

**Findings:** The findings showed a large proportion of the subjects reported making decisions without assistance in choice of purchase of clothing and cosmetics. Clothing worn by friends was the most often indicated influence on all clothing selections. Clothing and cosmetic selections were reported most often influenced by friends for the boys and by fashion magazines and money for the girls. Over half of the subjects reported impulse buying. Approximately twice as many boys as girls made impulse purchases of both clothing and cosmetics. Indecision and price were problems in buying. For all subjects the median was at the $35.01 - $40.00 interval for clothing expenditures and at the $7.01 - $8.00 interval for cosmetic expenditures. Almost all cosmetic purchases and a high proportion of clothing purchases were made by cash. Comparison of expenditures for clothing and cosmetics showed the range and the median were higher for the girls. The mode was over $50.00 for both boys and girls. It was concluded from the results of this study that these eleventh and twelfth grade boys and girls may need help in determining sound criteria for purchases of clothing and cosmetics. Further, there may be a need for study of consumer buying.
Purpose: To make a family background and interest survey of ninth grade girls enrolled in homemaking and to plan a unit for teaching family relations based on pupil needs.

Method: A questionnaire was developed to survey general family situations and concerns for study in the family relations subject area, and was administered to the 135 ninth grade girls enrolled in six homemaking classes at Truesdell Junior High School, Wichita, Kansas.

Findings: The majority of the girls were from intact families that contained an average of one less child per family than did broken or reconstituted families. These families lived in single family dwellings containing only the nuclear family. No girl expected to have educational training in addition to high school. Slightly over half of the mothers were full-time homemakers; parents were employed mostly as semi-skilled or skilled workers. Slightly over three-fourths of the girls expected to marry: half after high school, one-third during or after college; only one-third would like their marriage to be like their parents' marriage. Items of greatest concern for study in family relations were: understanding parents, being recognized as an individual, needs of individual family members, money management for family, success of teen age marriages, effect of teen age marriages on family relations, and understanding brothers and sisters. A family relations unit was developed around the areas of concern identified in the study.
Nowatzki, Margaret Mary


**Purpose:** To identify student teacher performance tasks involved in planning daily lessons and in teaching planned lessons and to determine the relative degree of importance attached to each task.

**Method:** A preliminary ranking instrument, containing forty-four student teacher competency statements related to planning and teaching planned lessons, was developed and administered. Findings and study of the task-unit concept led to revision as a rating scale containing forty-seven student teacher performance tasks. The Lesson Planning Teaching Task Performance Scale was administered once during Fall Semester, 1966, to nine home economics university supervisors from five states and fifteen home economics supervising teachers for Kansas State University; and twice to fifteen home economics student teachers at Kansas State University.

**Findings:** Similarities and differences found between ratings by the university supervisors and the supervising teachers on student teacher performance tasks. Complete agreement was shown on the highest importance rating by university supervisors and supervising teachers on 16 per cent of the planning and 21 per cent of the teaching tasks and by student teachers on 11 per cent of the teaching tasks before and after student teaching. Only the task concerned with teacher-pupil rapport was rated of "Great Importance" by all the supervisors and all the student teachers before and after student teaching. The conclusion drawn, based on limitations of the study, was that student teacher performance tasks were identified by the relative degree of importance associated with the tasks by university supervisors and supervising teachers. Nine tasks showed complete agreement on the highest importance rating.
Riemann, Nancy Jelinek


Purpose: To identify the values and benefits gained by young married Kansas women from enrollment in vocational homemaking.

Method: The twenty-seven subjects were 1961 and 1963 graduates of three representative Kansas high schools. Nineteen had children and all but five had been employed outside the home at some time since marriage. Collection of data was through use of a tape recorder and an interview schedule. A preliminary study was conducted to refine the interview schedule and technique. The taped interviews were forwarded to the Kansas State Board for Vocational Education for use in the 1968 national evaluation of home economics programs.

Findings: It was found that the area of clothing and textiles ranked first and foods and nutrition second in number of responses for values and benefits gained from study in homemaking. Foods and nutrition ranked first and the area of home management and consumer education second in number of suggested changes for program improvement. Recognized values and benefits derived from enrollment in vocational homemaking by young married Kansas women were identified in all areas of study. More values and benefits were identified for the areas of clothing and textiles and foods and nutrition than for the areas of home management and consumer education; personal and family relations; child care and development; housing, home furnishings, and related art; and health and safety.
Scott, Johnette Marie

Child Care and Development Unit for Slow-Learning Eighth Grade Pupils. Master's Report, 1968, Kansas State University. 55 p. Library, Kansas State University, Manhattan.

Purpose: To develop a unit in child care and development for eighth grade pupils who are slow learners.

Method: Criteria established in the review of literature were utilized in developing the learning experiences. No plans for teaching or evaluating the unit were included.

Recommendations: The unit developed in this study can serve as a guide in teaching slow-learning eighth grade girls in home economics in a unit on child care. A responsibility of the teacher would be to adapt the suggested unit to the needs of slow-learning students taking homemaking. Recommendations included: (1) Students and their parents be involved in further planning and defining objectives for the unit. (2) The unit be taught and a follow-up study made to determine the value to the slow-learning junior high girls. (3) Objectives and learning experiences be evaluated with the assistance of the parents who employ eighth graders to care for their children. (4) Materials appropriate for slow-learning students be developed for use when teaching the unit.
Purpose: To determine the significance of certain factors in causing students to enroll in agricultural education at Kansas State University and to plan to teach or not to teach.

Method: The population for this study was all students enrolled in agricultural education at Kansas State University during the spring semester of 1967. A questionnaire was administered to students in a required course of all enrollees. In addition the students doing student teaching at the time were included in the sample. Completed questionnaires were obtained from eighty-nine of the ninety-nine enrollees in agricultural education. After administering the questionnaire additional data was obtained from school records for each of the students included in the sample. Complete data was obtainable for seventy students of the sample. This was 70.6 per cent of the total population.

Findings: Fifty of the students in the sample indicated they planned to teach and twenty indicated they did not plan to teach. The remaining data was analyzed in relation to the above two groups. Thirty-five of those planning to teach and seventeen of those planning not to teach had had 4-H experience. All students in the sample had had farming experience. Forty of those planning to teach and fifteen of those planning not to teach had had vocational agriculture. All of these factors were found to be not significant at the .05 level. The average high school English, science and vocational agriculture grades for those planning to teach were 2.52, 2.70 and 3.53 respectively, based upon a four point system. For those planning not to teach the grades were 2.50, 2.70 and 3.60 respectively. There were no significant differences between the two groups at the .05 level. College English and science grades for those planning to teach were both 2.02 based on a four point system. For those planning not to teach they were 1.84 and 1.60 respectively. These differences were not found to be significant at the .05 level. The over-all college grade for those planning to teach was 2.34 while it was 2.10 for those planning not to teach. This difference was not statistically significant at the .05 level, but was significant in this study due to a minimum grade requirement for graduation which fell between the grades of these two groups.

"vocational agriculture teacher", "farm work", "vocational agricultural work", and "FFA work" were listed as the four most important influences for enrolling in agricultural education by both groups. The order differed from the above only in that those planning not to teach ranked the "vocational agricultural teacher" second, "farm work" third, and "vocational agricultural work" first. These four factors received 70.5 per cent of the total possible responses. Concerning the group that planned to teach, the three most influential factors towards that decision were "like to stay close to production agriculture"; "teaching is a challenge"; and "want to farm on the side". "College grades", "not interested in teaching", "took agricultural education only for the training", and "salary" were the four factors most influential in the students planning not to teach. At the .04 level, significantly more of the students planning to teach indicated that a teacher should first be an "educator" rather than an "agriculturalist" than did those planning not to teach.
Burgess, Lyle Charles


**Purpose:** This study was made to find what fund raising activities were used by the FFA chapters in the North Central Kansas District. The study also determined what activities were considered successful by the instructors and what activities were considered unsuccessful by the instructors.

**Method:** Data for the study was collected by questionnaires which were sent to all vocational agriculture instructors in the North Central Kansas District. Twenty-five of the twenty-seven instructors responded to the questionnaires.

**Findings:** The FFA chapters in the North Central Kansas District had an average income during the 1966-67 school year of $896.89. The average expense per chapter was $816.35. The vocational agriculture instructor in the North Central Kansas District had taught an average of 8.1 years with an average of 5.1 years in the same school. Each instructor had an average of thirty-six boys in his FFA chapter. The mean income per FFA member in the district was $24.51 and the mean expense per member was $22.30. The size of the FFA chapter had little effect on the mean income per member. The larger chapters earned an average of $2.75 more per member than did the smaller chapters. The teachers in the chapters with above average income had taught in the present school 1.8 times longer than those instructors with the below average income chapters. The money raising activities that were the most often used were dues, shop projects, selling calendars, prize money from livestock and machinery shows, selling safety materials and agricultural related items, renting chapter equipment, and operating concession stands. The unsuccessful activities reported were selling, raffle, gilt ring, test plot, blue rock shoot and donations. The freshman class was the most willing to work, followed by the sophomore, junior, and senior classes respectively. Fifty-six per cent of the chapters had no restrictions placed on their money raising activities while the remaining forty-four per cent had a restriction of some sort placed on their activities either by the school board or the administration. Conclusion of the study indicated that the first step in planning the financing of an FFA chapter is to develop a program of work from which an expense budget can be made. After the expense budget has been developed the chapter can plan the activities for raising money. More money than needed should be raised in case some activity does not reach its goal or some unexpected expenses arise. It was concluded also that the money raising activity should be accepted by the community have educational value, be in harmony with other individuals or groups, and preferably be agricultural related. The money raising activity should allow all of the members to participate and should not be in conflict with school policies. A recommendation of the study was that when certain money raising activities appear to be successful they should be used from year to year although new ideas should be tried. For the activity to be successful the members must be willing to work, it should have community acceptance and it should be well planned.
Elson, Donald Eugene

Operational Procedures for Multiple-Teacher Departments of Vocational Agriculture. Master's Thesis, 1968, Kansas State University. 88 p. Library, Kansas State University, Manhattan.

Purpose: (1) to compare the opinions of teachers and administrators with experience in multiple-teacher departments of vocational agriculture in Kansas, the state supervisor of Agricultural Education in each state, and the head teacher educator of Agricultural Education in each college or university preparing vocational agriculture teachers concerning the organizational and operational procedures of multiple-teacher departments of vocational agriculture and (2) to make recommendations based upon this study for the development of guidelines for establishment and/or operation of multiple-teacher departments in Kansas.

Method: The data for this study was obtained by a mailed opinionnaire. The sample consisted of forty-one teachers, twenty-one administrators, forty-nine supervisors, and seventy-six teacher educators. Eighty-two per cent of the sample responded. Statistical treatment of the data included frequency, per cent, and chi-square analysis.

Findings: The following conclusions were established from the findings of the study. (1) An additional teacher could be justified because of a high demand for young and/or adult farmer classes. (2) A high demand for specialized training of high school students could justify an additional teacher. (3) Teachers, administrators, and state supervisory personnel should all have a direct role in the development of policies for the multiple-teacher department. (4) Assignment of teaching duties should be made through cooperation of all teachers and the administrator and should be in writing. A definite assignment should be made concerning reports. (5) Students should be grouped according to year in school and taught by teachers specializing in particular areas. (6) Supervisory visits should be made by the teacher with a specialization which corresponds to the student's needs. At least one hour should be scheduled during each school day for visitation. (7) A multiple-teacher department should not have more than one F.F.A. chapter and all duties of the advisor should not be assigned to one teacher. The training of teams should be the responsibility of the teacher with an interest in the particular area. (8) Advisory councils are necessary for effective operation of multiple-teacher departments. (9) Each teacher in a department should have separate classrooms, but one shop would be sufficient with one teacher responsible for stocking the shop supplies. Scheduling use of facilities and/or equipment should be a shared responsibility of the teachers in the department. (10) One teacher should be selected as head teacher by the administrator with the approval of the teachers in the department. The head teachers should have the authority to make decisions within the policies of the school and should receive compensation for those added responsibilities in monetary form or by reducing his teaching load.
Elstrom, Allan Charles

A Weed Control Source Unit. Master's Report, 1968, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: To evaluate source material and to develop a weed control source unit for agronomic crops in prepared lesson plans that might be used by vocational agricultural teachers in preparing and teaching lessons on weed control.

Method: (1) Names of weeds that were very harmful in agronomic crops were obtained. (2) Information for developing this source unit was obtained from technical publications, text books, magazines, and by interviews. (3) The above material and interviews were reviewed. Selections from the material and interviews were made on their potential usefulness in helping Kansas vocational agricultural teachers teach lessons on weed control. (4) A tentative source unit was developed. (5) The tentative source unit was submitted to an advisory committee of two specialists. One reviewed the source unit from the standpoint of its organization and its value in meeting the needs of vocational agricultural teachers and one reviewed the source unit from the standpoint of its technical information. (6) The source unit was then revised on the basis of suggestions made by the advisory committee. (7) A tentative multiple choice 100 question examination, based on the material in the source unit, was developed. This examination was reviewed by three specialists. No major revisions were made from the tentative examination.

Findings: The usefulness of the material in the source unit was evaluated by a comparison of pre-test and post-test scores taken in connection with the teaching of lessons from the unit to Jewell High School vocational agricultural students. These students were divided into two groups. The freshmen and seniors were the control group and the sophomores and juniors were the experimental group. The pre-test was given to all the students. The source unit was taught to the experimental group and then all the students took the test again. The results of the pre-test and the post-test were analyzed. The findings showed that those students who received instruction from the source unit increased their scores from the pre-test to the post-test by 90.90 per cent. Those students not having any instruction from the source unit increased their scores 2.10 per cent. There was a total difference of 88.80 per cent between the experimental group and the control group.
Jarmer, Gary Edward

Student Involvement in Teaching Selected Lessons of Beef Cattle Production

Master's Report, 1968, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: (1) provide the teachers of Vocational Agriculture in Kansas with a procedure for obtaining student involvement in the teaching of beef cattle selection, feeding, slaughtering, and carcass evaluation; (2) involve students with beef cattle selection, feeding, slaughtering, and carcass evaluation; (3) compare the change of scores of the students in a pre and post test exercise which was developed by the author to measure general beef cattle knowledge; and (4) demonstrate to students the "New Look" in slaughter beef cattle production.

Method: The procedure for the study involved a personal purchase of four beef steers, weighing approximately 800 pounds. Prospective buyers of cut-up, packaged beef were secured and one sophomore student agreed to keep and care for the calves. A pre test designed to measure general slaughter beef cattle knowledge was designed and administered to two separate classes of high school Vocational Agriculture students. The test class was sophomores, the others were juniors. The cattle were selected, purchased and delivered to the cooperating student's farm. Each calf was named and given a letter designation which helped to identify him. Regular teaching continued with all lessons concerning slaughter beef cattle selection, feeding, slaughtering, and carcass evaluation relating to the four steers being used as a teaching device. The cattle were slaughtered and processed by the students and an extensive carcass evaluation study was initiated. Complete photographs were taken on 35 mm slide film to be used for further educational purposes.

Findings: After the carcass evaluation was complete, a post test was administered to both separate classes and the results were recorded. It was found that the sophomore group of students, who were involved in the teaching of selected slaughter beef cattle lessons, using live cattle, had raised from the mean score on the pre test of 45.0 points to a mean score on the post test of 72.8 out of a possible 100 points. This was an increase of 27.06 points on the test. The mean pre test score for the junior class, who had received essentially the same instruction, one year earlier, with the live cattle, was 53.50. The post test mean score for the junior class was noted to be 56.33 out of a possible 100 points. This was an increase of 2.83 points. It was recommended that a follow-up study be made in one year to determine the test scores of the sophomore test group after one year had elapsed. It was also recommended that local cooperating farmers could help conduct this procedure if careful planning was exercised. The purposes of the study were reviewed and compared with the findings. It was found that purpose one was accomplished by sending the procedure of this study to the State Supervisor of Vocational Education in Agriculture, and by submitting the procedure for publication in a national magazine for teachers of Vocational Agriculture. Purpose two was accomplished by subjectively observing an increased score on an objective test. Purpose three was accomplished by observing and recording the test scores of the students. Purpose four was accomplished by subjectively observing student reaction to the photographic slides taken of the live cattle and their carcasses.
Mann, Marvin W.

Selected Agricultural Mechanics Abilities as Rated by Teachers of Vocational Agriculture. Master's Report, 1963, Kansas State University, Library, Kansas State University, Manhattan.

Purpose: To survey the opinions of selected vocational agriculture teachers concerning the adequacy of their preservice training in selected agricultural mechanics abilities, and to survey the importance which the vocational agriculture teachers had attached to their instruction in selected agricultural mechanics abilities.

Method: The information for this study was obtained by mailing an opinionnaire to all vocational agriculture teachers in the state of Kansas that were presently teaching at the time of the study and had received their B. S. Degree at Kansas State University from 1960 through 1966. The opinionnaire contained 192 abilities in seventeen areas of agriculture mechanics. Respondents were asked to rate each ability in regard to quality of training as being "good", "fair", or "poor" and importance of training as being "very important", "important", or "not important".

Findings: Of the forty-five opinionnaires which were sent to the teachers of vocational agriculture, 100 per cent of the opinionnaires were returned. The data obtained from the forty-five returns revealed that all the abilities in the following six agriculture mechanics areas were rated as "very important" by 50 per cent or more of the forty-five respondents: (1) training in all agricultural machinery, repair, adjustment and servicing abilities, (2) training in all agricultural carpentry abilities with the exceptions of the ability to "identify wood and lumber", and the ability to "construct complex project", (3) training in all agricultural electricity abilities with the exception of the ability to "select electric meter", (4) training in all concrete and masonry abilities with the exception of the ability to "lay brick", (5) training in all the arc welding abilities with the exception of the ability to "install welder", and the ability to "solder", (6) training in all oxy-acetylene welding abilities with the exception of the ability to "weld aluminum" and the ability to "solder". There were fifty-five other abilities in seven other areas of agricultural mechanics which received "very important" ratings by 50 per cent or more of the forty-five respondents. The areas and numbers of abilities in each included: (1) three abilities in the area of forge and cold metal work, (2) six abilities in the area of tool fitting, (3) eight abilities in the area of soldering and sheet metal, (4) three abilities in the area of painting, (5) twenty-four abilities in the area of tractor maintenance, (6) six abilities in the area of farm power overhaul, and (7) five abilities in the area of irrigation and drainage. An attempt was also made to survey the quality or adequacy of agricultural mechanics training at Kansas State University. Respondents were asked to rate the adequacy of their preservice agricultural mechanics training in preparation for developing that particular ability in their vocational agriculture students. The respondents rated only those abilities in which they had received training at Kansas State University.
Purpose: To compare the effectiveness of having a student experience an agricultural occupation in the area of his choice in contrast to the student receiving an experience not in the area of choice. The study was undertaken for the following reasons: (1) Non-farm agricultural occupations are increasing and the number of farmers and ranchers is decreasing; (2) Vocational agriculture departments have been designated to train individuals in agriculturally related occupations; (3) Many vocational agriculture departments are in the small communities which have only a limited number of businesses to serve as work stations; (4) Students often show an interest in an area not available for exploration on the local level; (5) Many of the skills needed for an occupation are similar to the skills needed for another occupation.

Method: The Kuder Vocational Preference Test was used to test the students in the study. It was first given as a pre-test after the student had indicated a choice of an agricultural occupation. The students were then divided in two groups according to occupational choice. One group was placed in the area of choice of an occupation. The other group was placed in an occupation not in the area of choice. At the end of the three weeks exploration period, the two groups were again tested using the same Kuder Vocational Preference Test as a post-test.

Findings: The students with a choice of an occupational experience increased their average post-test scores in six of the ten phases for which the Kuder tested. The six students experiencing an occupation not of their choice increased their post-test scores in five of the ten areas being tested. A comparison of the differences in the pre-test and the post-test scores for the two groups revealed the no-choice group had a wider variation between the gains and losses in the pre-test and the post-test scores for the individuals within each group. Because of the limitations of such a small group being tested, the types of occupations available to be explored, the kind of community in which the study was made, this study should be repeated under other circumstances and with a different interest test being used as a measuring device. The six students making up the choice of an occupation group may have had a slight advantage to the six students experiencing an occupation in the area of no-choice. Their intelligence quotient scores, scholastic records and leadership abilities indicated to the researcher that this would be true.
Rawson, Wilbur

The Role of the State Supervisory Staff in Improving the Instructional Program of Vocational Agriculture Departments. Master's Report, 1968, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: To survey the opinions of selected vocational agriculture teachers concerning practices used by the State of Kansas supervisory staff in improving instruction and evaluating vocational agriculture departments in Kansas.

Method: A questionnaire of twenty-four items was developed which surveyed opinions related to practices used by supervisors in performing their supervisory functions. The questions concerning supervisory practices were grouped into five areas. The five areas were: promotion of the vocational agriculture program; improvement of the vocational agriculture program; maintenance of the vocational agriculture program; and processes that implement the supervision of vocational agriculture departments. The questionnaire was sent to forty vocational agriculture teachers, who were being supervised by the writer of this report.

Findings: In analyzing the responses by the teachers to the supervisory practices, a weighted value was assigned each degree of agreement or disagreement. A response of strongly agree was given a value of plus two; agree was given a value of plus one; disagree had a value of minus one, and strongly disagree was given a value of minus two. Thirty-five of the forty teachers returned completed questionnaires. Those supervisory practices related to improvement of instruction of the vocational agriculture program received the highest average numerical value. It was found that teachers expected supervisors to use practices that assisted them in developing effective vocational agriculture programs. Vocational agriculture teachers expected supervisors to discuss problems of their program with local school administrators, as well as suggesting improvements in teaching techniques used in instructing the vocational agriculture classes. According to the responses of the teachers surveyed, it was indicated that teachers wanted a written supervisory report returned to the school after a supervisory visit had been made. The following practices were also rated above the value established as important by the researcher: notify the teacher before making a supervisory visit; make one summer supervisory visit, and inform the teacher of other teaching jobs that are available. The practices of visiting the guidance department in the high school to discuss opportunities available for students taking vocational agriculture and the practice of assisting the vocational agriculture teacher develop adult and young farmer classes were rated as important in promoting the vocational agriculture program in the high school. The practices of assisting in developing a stronger F.F.A. chapter, and requiring an outline of the objectives and philosophies of the vocational agriculture program were not accepted by the teachers as important functions of supervision. Teachers felt supervisors should be asked to assist in the formal evaluation of the vocational agriculture department. The practices of the supervisor evaluating the program of study and assisting the teacher in establishing an advisory council were not judged important by the teachers. In response to the question concerning the number and length of supervisory visits, the teachers surveyed selected two visits, of two hours each, per year as desirable for effective supervision.
Stenzel, Samuel

The Leadership Role of the Vocational Agriculture Teacher: A Study of His Participation and Responsibilities in Professional and Community Organizations. Master's Report, 1968, Kansas State University. Library, Kansas State University, Manhattan.

Purpose: The purpose of the study was to survey the relationship between the leadership roles of the vocational agriculture teachers as advisors to the local Future Farmers of America chapters and their leadership roles as members in selected professional, civic, rural, and church organizations.

Method: The Kansas teachers of vocational agriculture were divided into three groups, according to their participation and rank in the Kansas Better Chapter contest for the years 1965-67. Group "A" consisted of the 21 vocational agriculture teachers whose Future Farmers of America chapters had been awarded the Gold Emblem. Group "B" was composed of the 57 Future Farmers of America chapter teachers whose chapters had been awarded the Standard or Superior rating. Those 62 Kansas vocational agriculture teachers whose chapters had not entered the Better Chapter contest were placed into group "C". A survey form was mailed to a selected sample of 78 per cent of the vocational agriculture teachers in Kansas with an instruction letter. A second letter and survey form were mailed two weeks later to all persons not responding to the original mailing. Ninety-seven per cent responded to the two mailings. The participants were asked to identify their membership, leadership responsibilities, and their attendance of conventions in eighteen professional, civic, rural, and church organizations.

Findings: The data was summarized and presented in tabular form. Each table corresponded to one of the six areas of leadership responsibility - organizational membership, constitutional offices, committee membership, committee chairman, convention attendance, and service as official delegates to conventions. Both the numbers and percentages of participation were recorded. The information was tabulated for each group and for the State of Kansas. To formulate the relationship between the leadership responsibility roles of the three groups, the data was placed into bar graphs to indicate the degree of participation by each group. Each group was placed on each of the six graphs according to their leadership role in each organization. All three groups of Kansas vocational agriculture teachers reported membership in the selected organizations. The membership mean in professional organizations for the combined groups was 97.1 per cent. It was 22.27 per cent in rural organizations, 18.7 per cent in civic organizations, and 82.1 per cent in church organizations. Group "A" reported the highest mean percentage of membership in rural, civic, and church organizations. Group "C" reported the highest mean membership percentage in professional organizations. The groups indicated teachers of vocational agriculture had assumed responsible roles of leadership in the organizations. The findings indicated the vocational agriculture teachers in group "A" had the highest mean percentage in both membership and leadership responsibilities for all the organizations in the survey. Their membership mean percentage was 55.1, group "B" had 52.6 per cent and group "C" had 53.4 per cent. The mean percentage of group "A" in their role in leadership responsibilities in all organizations was 13.0, group "B" was 8.2 per cent and group "C" was 7.1 per cent.
Wineinger, Earl


Purpose: To compare the association of fifteen characteristics of the total vocational agriculture program and fourteen features of the summer program.

Method: From the population of vocational agriculture teachers, having a minimum of five years continuous teaching in the same system and who had attended no more than one month of summer school during 1966, a sample of 54 teachers qualified for the study. Summer program report forms from the 54 teachers to the Kansas State Board for Vocational Education provided the source of data. The selected features of summer school programs and selected characteristics of the total vocational agriculture programs were compared in testing the null hypothesis that there was no association. The chi-square test at the .05 level of significance was used to test the association.

Findings: Of the 210 comparisons made, 194 of the comparisons showed no association and sixteen of the comparisons were found to be associated. Three of the features of vocational agriculture summer programs were found to result in no association to any characteristic of the total vocational agriculture program. Six features of vocational agriculture summer programs were associated with one characteristic of the total vocational agriculture program. Five features of vocational agriculture summer programs were associated with two characteristics of the total vocational agriculture program. Seven of the characteristics of the total vocational agriculture program were found to result in no association to any features of vocational agriculture summer programs. Three characteristics of the total vocational agriculture program were associated with one feature of vocational agriculture summer programs. Three characteristics of the total vocational agriculture program were associated with two features of vocational agriculture summer programs. One characteristic of the total vocational agriculture program was associated with three features of vocational agriculture summer programs. One characteristic of the total vocational agriculture program was associated with four features of vocational agriculture summer programs. In 194 of the 210 comparisons the conclusion would support the null hypothesis that the selected features of the summer program and the selected characteristics of the total vocational agriculture program represented no association classifications. In sixteen of the 210 comparisons the conclusion would reject the null hypothesis of no association.
SUBJECT INDEX
SUBJECT INDEX

This index lists the "KAN" numbers of abstracts which have been included in this volume under the major subject headings that have been assigned to characterize their content.

### Agricultural Education

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### Administration

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### Curriculum

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### Employment & Occupations

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Subject Index (con't)

### Evaluation

| 003 | 017 | 032 | 047 | 061 |
| 006 | 021 | 040 | 051 | 062 |
| 009 | 025 | 041 | 053 | 063 |
| 013 | 030 | 043 | 054 | 064 |
| 014 | 031 | 044 | 056 |

### F.F.A.

| 024 | 029 | 057 |

### Follow-up

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### Students

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### Subject Index (con't)

#### Teachers

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#### Teacher Education

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#### Teaching & Learning

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#### Young Farmer

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#### Other

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