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Opinions of School Adminsatrators Concerning Selected Aspects of the Program of Vocational Agriculture in East Tennessee

Charles Hugh Snodderly
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To the Graduate Council:

I am submitting herewith a thesis written by Charles Hugh Snodderly entitled "Opinions of School Administrators Concerning Selected Aspects of the Program of Vocational Agriculture in East Tennessee." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Agriculture and Extension Education.

George W. Weigers, Major Professor

We have read this thesis and recommend its acceptance:

Curtis H. Shelton, Elbert C. Henson

Accepted for the Council:

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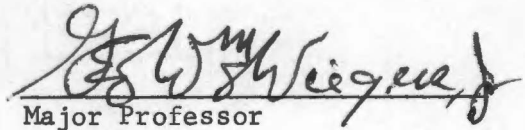
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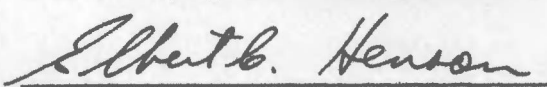
June 1962

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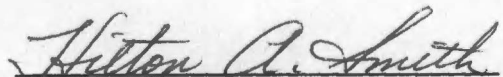
I am submitting herewith a thesis written by Charles Hugh Snodderly entitled "Opinions of School Administrators Concerning Selected Aspects of the Program of Vocational Agriculture in East Tennessee." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Agricultural Education.


Major Professor

We have read this thesis and
recommend its acceptance:

Accepted for the Council:


Dean of the Graduate School

OPINIONS OF SCHOOL ADMINISTRATORS CONCERNING SELECTED
ASPECTS OF THE PROGRAM OF VOCATIONAL AGRICULTURE
IN EAST TENNESSEE

A Thesis

Presented to

The Graduate Council of
The University of Tennessee

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
Charles Hugh Snodderly

June 1962

ACKNOWLEDGMENT

The writer wishes to express appreciation to all who co-operated in conducting this study.

It is with appreciation that the writer acknowledges the cooperation of the East Tennessee principals and superintendents who participated in this study. Special appreciation is extended to Dr. George W. Weigers, Jr., Professor Curtis H. Shelton, and Dr. Elbert C. Henson, who served as the examining committee.

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CHAPTER I

THE PROBLEM AND ITS DEFINITION

Vocational agriculture is an integral part of the curriculum in most rural high schools of East Tennessee. This important phase of the school curriculum merits the backing and support of the entire teaching and administrative staff in the school system. Especially should the superintendent of the school system and the high-school principal support the vocational agriculture program if it is to be successful.

In seeking adequate support for his program, the vocational agriculture teacher may well heed the following statements made by Cook in his book, A Handbook on Teaching Vocational Agriculture:

An agricultural instructor must be willing to cooperate with the school officials at all times. He should realize that he is part of the school system and that he must uphold the policies of the school. A school depends not only on its administrators, but also upon all of the teachers in the system. Like a chain, a school system is no stronger than its weakest link. Every teacher forms a link in the school; consequently, the system cannot be its strongest without every teacher co-operating and doing his part to help construct, build, and maintain a strong school system.¹

The program of vocational agriculture is one in which responsibilities are shared by many people. Others may be more

¹C. C. Cook, A Handbook on Teaching Vocational Agriculture (Danville, Illinois: Interstate Printing Company, 1938), pp. 24-25.

responsible than the teacher for its success or failure.²

I. STATEMENT OF THE PROBLEM

The purpose of this study was to determine the recommendations for vocational agriculture departments by East Tennessee secondary school principals, and county and municipal superintendents. The study has attempted to find both their appraisals of the existing programs and their recommendations for progress in order to keep pace with change. The areas of the programs included are the following: (1) need for the vocational agriculture program, (2) objectives of the vocational agriculture program, (3) enrollees for vocational agriculture, (4) course content for vocational agriculture, (5) facilities for conducting a vocational agriculture program, (6) Future Farmers of America, (7) supervised farming programs, (8) vocational agriculture teacher load, (9) out-of-school program, (10) effect of increased industry on vocational agriculture, and (11) evaluation of vocational agriculture programs.

II. IMPORTANCE OF THE STUDY

Many people are responsible for conducting programs of vocational agriculture in East Tennessee. Some of the key personnel involved are the administrators of the school systems. Knowledge of

²Clarence H. Breeding, "Appraisal of Vocational Education in Agriculture in Claiborne County by Business and Professional Leaders" (unpublished Master's thesis, The University of Tennessee, Knoxville, 1960), p. 2.

their commendations and recommendations will be of considerable value to teachers of vocational agriculture, teacher trainers, and state supervisors of vocational agriculture in planning their programs. Their cooperation and backing can be more effectively sought with the knowledge of their appraisals, recommendations and understandings of the program. Proper application of this knowledge will make for a more effective vocational agriculture program for East Tennessee. It will serve as a guide for similar studies with the same or other personnel in the school systems. It has served as an invaluable means of in-service training for the writer in preparation for further teaching in the field of vocational agriculture.

III. DEFINITION OF TERMS

The term "vocational agriculture" as used in this study refers to agriculture taught in secondary schools under the provisions of the Smith-Hughes and other subsidiary acts which lead to proficiency in the agricultural occupations.

The term "secondary school administrators" refers to those principals and superintendents in East Tennessee from school systems where there may be feasibilities of offering vocational agriculture.

The term "Smith-Hughes Act" as used in this study is the original vocational education act which provided federal aid for instruction in vocational agriculture and other vocational subjects of less than college grade and was passed in 1917.

The term "academic courses" refers to courses other than voca-

tional agriculture offered in the secondary schools.

The term "state plan" refers to Tennessee's State Plan for Vocational Education which is an agreement between the state board for vocational education and the U. S. Office of Education designed to meet the needs for vocational education in Tennessee.

The term "out-of-school program" as used in this study means classes conducted for young and adult farmers who are not enrolled in high-school vocational agriculture classes.

The term "supervised farming program" as used in this study refers to the farming program conducted by all vocational agriculture students to provide for practical application and further study of facts and skills learned in the classroom.

The term "supervisory visit" as used in this study refers to on-farm visits made by the vocational agriculture teacher to his students for the purpose of instruction.

The term "agri-industry occupations" refers to those occupations industrial in nature, yet closely related to farming and requiring some competency in that field.

The term "productive enterprise" refers to a crop or livestock project which shows production and is a part of the supervised farming program which the agriculture student conducts on his home farm.

The term "improvement project" refers to an undertaking involving a series of jobs designed to improve the appearance or increase the value of the student's home farm, and it is a part of his supervised farming program.

The term "supplementary farm job" refers to a recommended job performed by the student over and above those necessary to carry out his productive enterprises and improvement projects. The purpose is to gain additional farm experience.

The term "Future Farmers of America" or "FFA" refers to the national organization of farm boys studying agriculture. The program of this organization is an integral part of the instructional program of vocational agriculture.

IV. RESEARCH PROCEDURE

In this study an attempt has been made to find both the appraisals and recommendations of secondary school administrators for the program of vocational agriculture in East Tennessee. Questionnaires were developed by the writer after careful consideration of all phases of the program as offered in area high schools and with suggestions made by local school administrators.

A list of principals and superintendents in East Tennessee who were from systems where there may be feasibilities of offering vocational agriculture was obtained from the Directory of Public Schools State of Tennessee, 1960-1961.³ The list included administrators from school systems where vocational agriculture was not offered as well as

³State Department of Education, Directory of Public Schools State of Tennessee, 1960-1961, (Nashville: State Department of Education, 1960), pp. 13-122.

from systems where it was part of the curriculum.

In order to secure the information needed to answer the questions set forth in this study, questionnaires were mailed to 154 principals and superintendents throughout East Tennessee. These questionnaires were mailed and handled through the office of the Jefferson County Superintendent of Schools, with a letter of introduction from the superintendent encouraging a response.

One hundred and ten, or 71.5 per cent, of the 154 administrators who were mailed questionnaires completed and returned them.

A copy of the information blank may be found in the Appendix.

V. REVIEW OF RELATED LITERATURE

Breeding⁴ found that 82 per cent of his interviewees, consisting of business and professional people in Claiborne County, thought that four years of vocational agriculture should be offered in their high schools. He also found that 96 per cent of the interviewees said that vocational agriculture would continue to be of value as the county becomes industrialized. He further found that 88 per cent of his respondents suggested no additional duties for vocational agriculture teachers other than teaching all-day classes, conducting adult farmer classes, and conducting Future Farmers of America activities. It was further indicated by 85 per cent of his respondents that a complete, supervised farming program should consist of productive enterprises,

⁴Breeding, op. cit., pp. 92-94.

improvement projects, and supplementary farm jobs.

Butler conducted a study on some guidance concerns in vocational agriculture which pointed out that about 25 per cent of the high-school vocational agriculture graduates in Tennessee were entering into full-time farming. Another 27 per cent were entering occupations related to farming. According to employers, 73.3 per cent of employees in related occupations needed agricultural training.⁵

Calton found that of the Tennessee graduates of vocational agriculture in 1958, 35 per cent were farming full time or on a part-time basis.⁶

Cardozier and Horne reported a study on young farmer education as viewed by secondary school administrators, teacher trainers, and supervisors of vocational agriculture. They found that, for the most part, views of school administrators did not differ greatly from those in the field of agricultural education. However, there were exceptions. An overwhelming majority of agricultural educators thought that the teacher of vocational agriculture should have two hours at the end of each school day for young farmer work. Most school adminis-

⁵Jimmy Joe Butler, "Some Guidance Concerns in Vocational Agriculture" (unpublished Master's thesis, The University of Tennessee, Knoxville, 1959), pp. 32-48.

⁶Walter Gene Calton, "The Setting of Vocational Agriculture in Tennessee" (unpublished Master's thesis, The University of Tennessee, Knoxville, 1959), pp. 27-28.

strators considered the idea good, but almost one half of them said that it was impractical. Administrators did not give as much importance to on-farm supervision as did agricultural educators. All groups considered it important that the teacher keep the local administration informed on the progress of the young farmer program. Direction of the state supervisory staff was considered of equal importance by both groups. State and federal aid was considered important by all groups, but school administrators emphasized this to a greater extent than did others. A large majority of the four groups considered a high-school vocational agriculture student more than one student when computing teacher load.⁷

VI. LIMITATIONS OF THE STUDY

The study was limited to one hundred and ten principals and superintendents throughout East Tennessee. A few questionnaires were mailed to this group, but a few did not complete all the questions because of lack of information or some other reason. There is no implication that evaluations and appraisals made in this study apply to all personnel involved in vocational agriculture in East Tennessee. They

⁷V. R. Cardozier, T. J. Horne, and the A. V. A. Research Committee, "Young Farmer Education as Viewed by Superintendents and Principals and Teacher Trainers and Supervisors of Agricultural Education," Summaries of Studies in Agricultural Education, United States Department of Health, Education, and Welfare, Vocational Division Bulletin No. 282, Agricultural Series No. 75 (Washington: U. S. Government Printing Office, 1960), pp. 32-33.

are considered by the writer to be merely representative of the above-mentioned segment of involved personnel.

CHAPTER II

PRESENTATION AND ANALYSIS OF DATA

The study as presented in this chapter was compiled from an analysis of the one hundred and ten questionnaires. Thirty-one of these questionnaires were completed by superintendents of school systems, and seventy-nine were returned by principals of high schools throughout East Tennessee. All questions in the questionnaire were concerning items considered vital to the success of a complete vocational agriculture program.

To better present and explain the opinions expressed, tables were set up for each of the major areas under question. Preceding each table or group of similar tables is a brief analysis and interpretation of the findings. Statements and remarks precede the table to which they pertain.

It should be mentioned that percentages for each table were based only on the number of respondents answering that part of the questionnaire, and not on the total number of respondents.

The purpose of the first question in this study was to determine the experiences of the principals and superintendents as school administrators. An analysis of Table I shows that of the thirty-one superintendents responding, eighteen served as principals of high schools with a range in years of 0.5 to 22, with an average of 9.6 years. It also shows that they have tenures as superintendents of school systems that range from 0.25 to 18 years, averaging 4.5 years.

TABLE I

POSITIONS HELD IN SCHOOL SYSTEMS BY THE THIRTY-ONE
SUPERINTENDENTS PARTICIPATING IN STUDY

Positions	Per Cent	Range in Years		
		Least	Greatest	Average
1. High-school principal	58	0.5	22	9.6
2. Superintendent of a school system	100	0.25	18	4.5
3. School supervisor	10	2	7	4.3
4. Teacher	97	1	24	7.7

Three superintendents indicated that they had been school supervisors, and thirty stated that they had been teachers with a range of from 1 to 21 years, averaging 7.7 years. Three superintendents reported having been elementary school principals, and one had taught in the Institutional-on-Farm Training Program.

There were seventy-nine principals who responded in this study. An analysis of Table II shows their experience as administrators and teachers. It is significant to note that their experience as principals of secondary schools ranged from 1 to 37 years, averaging 10.5 years. Nine of the principals had been superintendents of school systems sometime during their career with tenures ranging from 2 to 10 years. It was further revealed in the study that six had been supervisors of instruction, and seventy-five of those reporting had at some time been teachers. Their experience as supervisors ranged from 1 to 3 years, while they had been teachers from 1 to 38 years with an average experience of 8.6 years.

It is understandable that the experience and tenure of the administrators will, to a large extent, enhance their understanding of the total school program, including vocational agriculture. It is likewise significant to their understanding of the need for a vocational agriculture program that they have some contact with the occupation of farming itself. Table III reveals their experience in farming.

In making the study, each person interviewed was asked the question, "What experience have you had in farming?" Each person

TABLE II

POSITIONS HELD IN SCHOOL SYSTEMS BY THE SEVENTY-NINE
PRINCIPALS PARTICIPATING IN THIS STUDY

Positions	Per Cent	Range in Years		
		Least	Greatest	Average
1. High-school principal	100	1	37	10.5
2. Superintendent of a school system	11	2	10	6.2
3. School supervisor	7	1	3	2.0
4. Teacher	95	1	38	8.6

TABLE III

EXPERIENCE IN FARMING AS INDICATED BY THE
ONE HUNDRED AND TEN ADMINISTRATORS
PARTICIPATING IN THIS STUDY

<u>Experience</u>	<u>Responses of Administrators</u>	
	<u>Number</u>	<u>Per Cent</u>
1. Born and reared on farm	71	65
2. Farmed full time	21	19
3. Farmed part time	58	52
4. Owned or now owns a farm	45	41
5. Lived on farm	3	3
6. Others	3	3

could respond to as many of the listed experiences in Table III as he thought applicable. The item "lived on farm" was counted only when it was listed as the only experience. In analyzing Table III, it is notable that 65 per cent of the one hundred and ten responding administrators indicated that they were born and reared on the farm, while 19 per cent are now, or have been, farming full time. It is further shown that 41 per cent are, or were, farm owners; 3 per cent listed "lived on farm" as their only experience; and 9 per cent recorded no farm experience at all. The fact that 91 per cent of administrators have had some type of farm experience should justify, in part, the importance of decisions brought out later in this study.

Table IV shows the distribution of answers to the question, "What experiences have you had in vocational agriculture?" Each respondent could check as many experiences as were applicable. Later on in the study it is brought out that the nature of experiences will have a direct bearing on the answers to parts of the questionnaire pertaining to the importance of vocational agriculture in the school curriculum. It appears that the more experience the administrator has with vocational agriculture, especially former teachers and students, the more favorable are their answers to questions concerning the importance of vocational agriculture in their schools.

An analysis of Table IV shows that 39 per cent of the principals and superintendents responding indicated that they were former students of vocational agriculture, and 10 per cent were former vocational agriculture teachers. It is further revealed that 65 per cent of the

TABLE IV

SECONDARY SCHOOL ADMINISTRATORS INDICATING
EXPERIENCES WITH VOCATIONAL AGRICULTURE

<u>Experiences</u>	<u>Responses of Administrators</u>	
	<u>Number</u>	<u>Per Cent</u>
1. Former student of vocational agriculture	43	39
2. Former vocational agriculture teacher	11	10
3. Worked on the faculty with vocational agriculture teacher	71	65
4. Worked as an administrator where vocational agriculture was taught	85	77
5. Have had no experience with vocational agriculture	12	11
6. Others	3	3

administrators worked on the faculty with vocational agriculture teachers, and 77 per cent served as administrators where vocational agriculture was taught. Eleven per cent had no experience with vocational agriculture, and 3 per cent had taught in the Institutional-On-Farm Training Program.

Table V deals with the training that the administrators have had in technical agriculture other than vocational agriculture. This also may have a bearing on the understanding they have of the need for the vocational agriculture program. In Table V it is found that 8 per cent received training in nonvocational agriculture and 21 per cent had taken college courses in agriculture.

In analyzing the previous tables of this study, it is obvious that the responding superintendents and principals have had many and varied experiences in the field of agriculture. In general, most of the administrators have had enough experience to have a working knowledge of vocational agriculture. However, many have had limited experience with vocational agriculture, and some have had none.

I. NEED FOR THE VOCATIONAL AGRICULTURE PROGRAM

In order to determine the appraisals of the respondents as to the needs for vocational agriculture in the school curriculum, they were asked to give the relative importance of technical know-how in agriculture in this area by answering the question, "To what extent does the effective use of the technical know-how in agriculture in-

TABLE V

SECONDARY SCHOOL ADMINISTRATORS INDICATING
TRAINING IN TECHNICAL AGRICULTURE OTHER
THAN VOCATIONAL AGRICULTURE

Training	Administrators Responding	
	Number	Per Cent
1. High-school nonvocational agriculture	9	8
2. College courses in agriculture	23	21
3. Others	1	1

fluence the economy of people in this area?"

An analysis of Table VI shows that 35 per cent thought that the effective use of the technical know-how in agriculture affected the economy of the people in this area a great extent, 55 per cent thought that the economy was affected to a moderate extent, and 10 per cent thought that the economy was influenced to a small extent. Most of the administrators checking "a small extent" came from industrial areas.

One question in this study was to determine the opinions of the respondents as to how much training in agriculture a farmer needs in order to do an efficient job of farming. The respondents were given the opportunity to check as many of the types of training suggested as they thought applicable. The responses to the types of training suggested are shown in Table VII.

A study of Table VII reveals that 84 per cent of the respondents checked "high school vocational agriculture" as all, or part, of the training needed by farmers; 33 per cent included "college" as part of the needed training; 56 per cent checked "agriculture extension service"; 54 per cent checked "soil conservation service"; and 3 per cent checked "others." Under "others" they included farm experience, adult classes, and periodicals. Another fact that is not shown in the table, but one that is quite significant, is that 13 per cent did not check anything but indicated that they did not know what training was needed. Other facts not shown in the table are that 19

TABLE VI

SECONDARY SCHOOL ADMINISTRATORS INDICATING THE EXTENT
THE EFFECTIVE USE OF TECHNICAL KNOW-HOW IN
AGRICULTURE INFLUENCES THE ECONOMY OF
PEOPLE IN THIS AREA

Extent of Influence	Responses of Administrators	
	Number	Per Cent
1. A great extent	39	35
2. A moderate extent	60	55
3. A small extent	11	10

TABLE VII

SECONDARY SCHOOL ADMINISTRATORS INDICATING AMOUNT OF
TRAINING NEEDED TO DO AN EFFICIENT JOB FARMING

Training	Responses of Administrators	
	Number	Per Cent
1. High-school vocational agriculture	92	84
2. College	36	33
3. Agriculture extension service	62	56
4. Soil conservation service	59	54
5. Others	3	3

per cent indicated that vocational agriculture was the only training needed; and 14 per cent did not specify vocational agriculture, but indicated other sources as needed training.

The fact that 84 per cent of respondents indicated that vocational agriculture was needed training is an indication that the course is filling the needs as an educational program for farmers. It is also notable that this figure is considerably higher than that of any other agency listed.

Vocational agriculture is normally offered four years in the high-school curriculum. Educators in this field indicate that this is necessary in order to fulfill the purposes of the course. However, an original questionnaire was presented to local administrators for recommendations for improvement, and it was suggested that the number of years to be offered be included in the inquiry. The state plan for vocational education states that "all schools with approved vocational agriculture departments will be expected to offer a three- or four-year course in agriculture in grades 9 through 12."¹ Table VIII reveals the opinions of the respondents as to whether vocational agriculture should be offered two, three, or four years in the high-school curriculum.

In analyzing Table VIII it should be noted that only eighty-six respondents checked two, three, or four years. The remaining twenty-four respondents either left the question blank or wrote in the word

¹Tennessee State Board of Vocational Education, State of Tennessee Plan for Vocational Education (Nashville: Tennessee State Board of Vocational Education, 1959), p. 19.

TABLE VIII

EIGHTY-SIX SECONDARY SCHOOL ADMINISTRATORS INDICATING NUMBER
OF YEARS VOCATIONAL AGRICULTURE SHOULD BE
OFFERED IN THEIR SCHOOLS

Number of Years	Administrators Responding	
	Number	Per Cent
1. Two years	21	24
2. Three years	10	12
3. Four years	55	64

"none" because they did not deem it feasible to offer vocational agriculture in their schools because of industrialization or other reasons. It should be again explained that these questionnaires were sent to all city and county secondary school administrators in East Tennessee with the exception of those in the larger cities, namely, Chattanooga, Knoxville, Kingsport, Bristol, and Johnson City. Consequently, several administrators from relatively urban sections answered these questionnaires.

Further analysis of Table VIII indicates that 24 per cent of the respondents specified that only two years should be offered in their schools, while only 12 per cent indicated that a three-year course should be offered. It is noted that 64 per cent of respondents specified that the full four-year course should be offered.

An attempt was made to determine the opinion of the respondents as to why vocational agriculture is now a part of their school curriculum. Superintendents and principals who now have vocational agriculture as part of their curriculum were the only ones included in this part of the inquiry. The respondents were given the opportunity to check as many of the reasons suggested as they thought applicable. The responses to the reasons suggested are shown in Table IX.

In analyzing Table IX it is significant that 75 per cent of the respondents thought that there was a definite need for the program in their communities. It is evident that this reason is the most complimentary to the program. It is the opinion of the writer that this figure is good, but a more ideal situation would be for nearer 100

TABLE IX

OPINIONS OF EIGHTY-FOUR SECONDARY SCHOOL ADMINISTRATORS AS TO
WHY VOCATIONAL AGRICULTURE IS NOW A PART OF
THEIR SCHOOL CURRICULUM

Reason	Administrators Responding	
	Number	Per Cent ^a
1. Definite need for the program	63	75
2. Federal and/or state aid	34	40
3. Tradition	36	43
4. Community requests it	36	43
5. For low-ability students	16	19
6. Have facilities available	42	50
7. Others	2	2

^aPercentages are based upon number of respondents having vocational agriculture as part of their curriculum and completing the part of the questionnaire from which this table was taken.

per cent of administrators to feel that the vocational agriculture program is needed in their communities. Table IX further shows that 40 per cent checked "federal and/or state aid" as a reason for vocational agriculture being offered. Other listings with their percentages were: "tradition," 43 per cent; "community requests it," 43 per cent; "for low-ability students," 19 per cent; "have facilities available," 50 per cent; and "others," 2 per cent. Another interesting observation is that one administrator stated that vocational agriculture should be for high-ability students. It seems that administrators checking "tradition" and "for low-ability students" were more critical of the program in other instances.

Table X shows the response made to the following pointed and direct question, "Do you think your secondary schools should continue to offer vocational agriculture?" This, of course, applied only to those respondents who had vocational agriculture as part of their curriculum. Table X reveals that 81 per cent thought that vocational agriculture should continue to be offered in their schools, while 13 per cent indicated that it should not be continued. Six per cent did not check either "yes" or "no" to this question.

The respondents were asked to give reasons why vocational agriculture should or should not be offered. Some of the statements given by respondents who indicated that vocational agriculture should be continued are revealed in the following quotations:

Farmers must be trained in technical agriculture.

TABLE X

OPINIONS EXPRESSED BY SECONDARY SCHOOL ADMINISTRATORS AS TO
WHETHER VOCATIONAL AGRICULTURE SHOULD CONTINUE
TO BE OFFERED IN THEIR SCHOOLS

<u>Item</u>	<u>Responses of Administrators</u>	
	<u>Number</u>	<u>Per Cent</u>
1. Yes	68	81
2. No	11	13

The agricultural section teaches those we can't.

All need some knowledge in agriculture. Few use it. We need a full time department.

About 40 per cent of our students come from the farm.

We are located in an ag community.

Yes, to improve the overall social conditions of our community.

Yes, with the understanding that the vocational agriculture teacher may be assigned to other areas.

Most of our students work on farms after graduation.

Should be continued for certain students but not the majority.

Yes, but vo-ag. must liberalize its program to include related activities.

Statements given by respondents who indicated that vocational agriculture should be discontinued in their schools were:

Not enough students go into farming after completing school. The time spent in ag. could better be used in other fields.

Industrial area-- few remain on farms.

Greater need for other subjects.

Lack of coordination with other school programs.

Respondents who checked neither "yes" nor "no" to question gave the following statements:

Should be discontinued in some schools where is not justified. Other vocational subjects would be more valuable.

It depends on community. We have two large industries moving to this community which might prevent ag. from being taught within the next three years.

Another fact that is not shown in Table X is that all administra-

tors who favored discontinuing vocational agriculture in their schools were principals.

A study by Breeding showed that 100 per cent of the business and professional leaders interviewed in Claiborne County thought that vocational agriculture was of value to those boys who have gone into occupations other than farming.² This does not coincide with a few of the above statements.

Recent studies made in the land-grant colleges and universities throughout the country indicated that vocational agriculture was sound preparation for college work. The following article, quoted in part, was published in the Tennessee Agricultural Education Service Bulletin, May 1961:

Some counselors and others are prone to argue that the best preparation for college is the so-called "college prep" program, regardless of the future prospective occupation. Nowhere is there any statistical data to support them.

.

Recently every FFA chapter adviser in the United States received the results of studies in such states as California, Ohio, Oregon, Missouri, Kansas, Iowa, Maryland, North and South Carolina, Oklahoma, Colorado, and Nebraska. The studies were made in the land-grant colleges and universities of these states.

In every state, vocational [sic] agriculture students did better work in college, or equal work, except in two fields reported in two states only. Ohio State reported vo-ag students as not doing as well in college English, and Iowa State reported vo-ag students as not doing as well in chemistry.

²Clarence H. Breeding, "Appraisal of Vocational Education in Agriculture in Claiborne County by Business and Professional Leaders" (unpublished Master's thesis, The University of Tennessee, 1961), p. 46.

Nine studies found vo-ag students doing superior college work, and eight found vo-ag students to have no different records than other students. All tests were within recent years. Repeated studies have shown vo-ag students to be more active in student functions than the general enrollment.³

Twenty-five respondents in this study were from schools or school systems that did not offer vocational agriculture. An attempt was made to get the opinions of the respondents as to why it was not offered. Table XI shows the distribution of suggested reasons in answering the question, "If vocational agriculture isn't offered, what are the reasons?" Each respondent could list as many suggestions as he thought applicable.

An analysis of Table XI shows that 60 per cent of the respondents thought that there was no significant need for the program in their schools. Twelve per cent indicated "lack of facilities" as a reason, 32 per cent checked "lack of student interest," 12 per cent checked "expense greater than benefits," and 4 per cent indicated "lack of qualified teachers." It is interesting to note that none of the respondents checked "too many administrative problems." It is noted that it was one of the criticisms of some administrators from schools where vocational agriculture was offered. Table XI further reveals that 56 per cent thought that the enrollment of farm boys was too small, 36 per cent thought the percentage of students entering agriculture too small, and 8 per cent checked "others" as a reason. One respondent

³"Ag Is Sound Prepping for College Work," Tennessee Agricultural Education Service Bulletin (University of Tennessee Department of Agricultural Education), 7:19, May, 1961, citing California Future Farmer, November, 1960.

TABLE XI

TWENTY-FIVE SECONDARY SCHOOL ADMINISTRATORS INDICATING THEIR
OPINION WHY VOCATIONAL AGRICULTURE IS NOT
OFFERED IN THEIR SCHOOLS

Reason	Administrators Responding	
	Number	Per Cent
1. No significant need for the program	15	60
2. Lack of facilities	3	12
3. Lack of student interest	7	28
4. Expense greater than benefits	3	12
5. Lack of qualified teachers	1	4
6. Too many administrative problems	0	0
7. Percentage of school enrollment of farm boys too small	13	52
8. Percentage of students entering agri- culture too small	8	32
9. Others	2	8

stated that the board of education prevented it from being offered, and another stated that the school was located in a suburban area.

II. OBJECTIVES OF VOCATIONAL AGRICULTURE

Every teacher of vocational agriculture should have clear-cut teaching objectives for every phase of his teaching program. Hammonds states, "A teaching objective represents a learning or learnings to be secured--a change or changes to be brought about in the behavior of the learners."⁴ Therefore, there will be a change in the knowing behavior, feeling behavior or doing behavior. Vocational agriculture is somewhat unique in that it goes further beyond the objective of acquiring knowledge than most academic courses in school. There is great emphasis placed on the combination of the knowledge behavior, the doing behavior and the feeling behavior.

Every vocational agriculture teacher should make every effort to see that his co-workers, particularly his administrators, know what his teaching objectives are. Thus, he can better secure their co-operation in reaching them.

Breeding found that 59 per cent of the business and professional men in Claiborne County, Tennessee, thought the purpose of vocational agriculture was to provide instruction applicable to farming and agricultural occupations related to farming, which contributes to all common

⁴Carsie Hammonds, Teaching Agriculture (New York: McGraw-Hill Book Company, 1950), p. 51.

agricultural occupations.⁵

Table XII endeavors to show the thinking of the respondents as to the objective or objectives which their vocational agriculture departments were attempting to achieve. Respondents were asked to check as many suggested objectives as apply and rank according to their importance. It should be pointed out here that all the respondents did not rank the suggested objectives according to their importance, but simply checked the ones that were applicable. Percentages under "per cent responding" include objectives thought applicable by both those who ranked them and those who did not. Listings under "per cent ranking according to importance" were based only on those respondents who ranked them 1, 2, 3, etc.

In analyzing Table XII it is found that 86 per cent of respondents thought that their vocational agriculture departments were trying to provide basic training in agriculture, which is applicable to the common agricultural occupations. Of those ranking them, 32 per cent classified this as the most important objective, 29 per cent classified it second, and 21 per cent classified it third. Seventy per cent of the respondents thought that their schools were attempting to provide specific training for farming. Of those who ranked them, 14 per cent ranked it first in importance, 43 per cent ranked it second, and 25 per cent ranked it third.

In further analyzing Table XII, it is revealed that 53 per cent

⁵Breeding, op. cit., p. 57.

TABLE XII

SECONDARY SCHOOL ADMINISTRATORS' INDICATED OPINION OF MAJOR OBJECTIVES
VOCATIONAL AGRICULTURE SHOULD ATTEMPT TO ACHIEVE

Objectives	Per Cent Responding	Per Cent ranking according to importance			
		First	Second	Third	Fourth
1. To provide basic training in agriculture, which is applicable to common agricultural occupations	86	32	29	21	0
2. To provide specific training for farming	70	14	43	25	0
3. To prepare students for agricultural college entrance	53	0	0	11	36
4. To provide the student with a general, yet practical, knowledge of agriculture	84	36	25	18	0
5. Others	7	0	0	0	0

of the administrators indicated that their schools were attempting to prepare their students for agriculture college entrance. However, none of the respondents classified it either first or second. Eleven per cent of those ranking them classified this objective third, and 36 per cent classified it fourth.

Table XII also reveals that 84 per cent of the respondents indicated that their schools were trying to provide the student with a general, yet practical, knowledge of agriculture. Thirty-six per cent of the respondents who ranked them placed this objective first, 25 per cent ranked it second, and 18 per cent ranked it third.

Seven per cent of the respondents indicated that their vocational agriculture departments were trying to achieve objectives other than those suggested; some of these are quoted below:

To provide work experience.

It is easy course for credit.

Leadership

Offer a mechanics program.

Catch all course--easy for boys.

After attempting to determine what the administrators thought their vocational agriculture departments were now attempting to achieve, the respondents were asked a further question, "What changes would you suggest if you were to develop a new set of objectives for vocational agriculture?"

It is notable that 71 per cent either gave no suggestions or

stated that the present objectives were adequate. The remaining 29 per cent had suggestions, some of which are quoted below:

Teach more agri-business.

More shop training in light mechanics.

Have more students in classes.

Offer 1 year of non-vo-ag.

Part-time and only for boys with farming programs.

Ag. part of the high-school curriculum.

Concentrate on the small part-time farmer who has a job and a few acres plus a garden.

Broader program to include hobby farm activity, gardening, flowers, pets, etc.

Too many non-ag boys in 4 years.

Overlapping of 4H clubs and ag. program.

To make possible the giving of more students to the ag. teacher.

Require uniform training.

More emphasis on classroom study and research.

School own or have access to demonstration farm close at hand.

Less restrictions on use of time and number of students.

Boys other than farm boys can benefit from it.

While a few of the above quotations may be criticisms rather than suggestions or recommendations, they may help vocational agriculture teachers to look at their programs through the eyes of their administrators.

III. ENROLLEES FOR VOCATIONAL AGRICULTURE

The writer was very much interested in determining the recommendations the respondents had for enrolling students in vocational agriculture classes. Before encouraging or discouraging students to enroll, consideration should be given as to who can benefit from the course.

In further pursuing the study, each respondent was asked the question, "In your opinion, should restrictions be placed on boys who wish to enroll in vocational agriculture?" They were asked to answer the question "yes" or "no." Table XIII shows that 70 per cent of the respondents indicated that restrictions should be made, and the remaining 30 per cent specified that no restrictions should be placed on boys enrolling in the course. The respondents who specified that restrictions should be placed were asked to check as many suggested restrictions as they thought applicable. Table XIV shows the distribution of these restrictions.

An analysis of Table XIV shows that 23 per cent indicated that students must be reared on farm, and 66 per cent listed that boys must have desire and opportunity to become employed in agricultural occupations including farming after completing high school. It is noted that 84 per cent of respondents indicated that each boy must have facilities to carry out a project or projects acceptable to local teacher of agriculture. Only 7 per cent specified that they must have ability to do college work, and 4 per cent listed that boys must

TABLE XIII

SECONDARY SCHOOL ADMINISTRATORS INDICATING WHETHER
RESTRICTIONS SHOULD BE PLACED ON BOYS WHO WISH
TO ENROLL IN VOCATIONAL AGRICULTURE.

Item	A ministrators Responding	
	Number	Per Cent
1. Yes	77	70
2. No	33	30

TABLE XIV

SECONDARY SCHOOL ADMINISTRATORS INDICATING RESTRICTIONS
TO BE PLACED ON STUDENTS ENROLLING IN
VOCATIONAL AGRICULTURE

Restrictions	<u>Administrators Responding</u>	
	<u>Number</u>	<u>Per Cent</u>
1. Must be reared on farm	25	23
2. Must have a desire and opportunity to become employed in agricultural work including farming after completing high school	72	66
3. Must have facilities to carry out a project or projects acceptable to local teacher of vocational agriculture	92	84
4. Must have ability to eventually do acceptable college work	8	7
5. Must intend to seek employment in any field after finishing high school	4	4
6. Others	0	0

intend to seek employment in any field after completing their schooling in order to qualify for the course.

The writer has endeavored to determine the thinking of the respondents concerning who should decide whether a boy should enroll in vocational agriculture. The writer believes that the same thinking should apply to this type of program as to any other special program in the school--such as band, athletics--in that the teacher and the boy are more or less the deciding individuals.

Table XV is a tabulation of responses to the question, "Who should decide whether a boy should enroll in vocational agriculture?" Responses were given for suggested personnel for Agriculture I, II, III, and IV. It is noted that the vocational agriculture teacher should decide whether students should enroll in Agriculture I in the opinion of 77 per cent of the respondents. Seventy-three per cent indicated he should help decide for students enrolling in Agriculture II, 71 per cent for Agriculture III, and 72 per cent for Agriculture IV. The school counselor was picked by 54 per cent of the respondents to help make decisions for students enrolling in Agriculture I, 47 per cent for students enrolling in Agriculture II, 43 per cent for those enrolling for Agriculture III, and 44 per cent for Agriculture IV.

The principal was picked by 49 per cent of the respondents to help decide who should enroll for Agriculture I, 36 per cent for Agriculture II, 35 per cent for Agriculture III, and 36 per cent for Agriculture IV.

TABLE XV

SECONDARY SCHOOL ADMINISTRATORS INDICATING WHO
SHOULD DECIDE WHETHER A BOY SHOULD
ENROLL IN VOCATIONAL AGRICULTURE

Who	Per Cent Responding			
	Agr. I	Agr. II	Agr. III	Agr. IV
1. Vocational agriculture teacher	77	73	71	72
2. School counselor	54	47	43	44
3. Principal	49	36	35	36
4. Boy	80	58	52	52

The boy was selected by 80 per cent of the respondents to help decide for himself whether to enroll in Agriculture I. However, it is notable that percentages of respondents selecting him to decide for Agriculture II, III, and IV were considerably less. Fifty-eight per cent indicated that the boy should help decide for Agriculture II, 52 per cent for Agriculture III, and 52 per cent for Agriculture IV.

IV. COURSE OF STUDY

Vocational agriculture is rather unique in that courses of study are developed for each individual school community and not on a county, district, or state basis. In general the responsibility rests largely with the teacher of agriculture. It is reasonable to assume that there is no justification for a course that does not meet the needs of the students. The course is for the students. Until they and their needs are considered, feasibility of teaching certain learnings is not known.

In this study principals and superintendents were asked, "What should be taught in high-school vocational agriculture classes?" The respondents were given an opportunity to check a list of suggested items and to suggest others. A study of Table XVI reveals that 63 per cent thought that course content should be based on boys' farming projects; 87 per cent indicated that course content should be based on present and future needs of the community; and 91 per cent suggested that it should be designed to give a general, broad knowledge of agriculture and related fields.

TABLE XVI

SECONDARY SCHOOL ADMINISTRATORS INDICATING WHAT
SHOULD BE TAUGHT IN HIGH-SCHOOL
VOCATIONAL AGRICULTURE CLASSES

<u>Item</u>	<u>Administrators Number</u>	<u>Responding Per Cent</u>
1. Course content should be based on boys' farming projects	69	63
2. Course content should be based on present and future needs of the community	96	87
3. Course content should be designed to give a general, broad knowledge of agriculture and related fields	100	91
4. Others	0	0

Most authorities on planning courses of study for vocational agriculture would disagree with many of the administrators on their above majority selection and would specify items 1 and 2 as bases for planning course content. Hammonds states that the community in which the teacher works sets the educative environment through which he must work. He also points out that one can give vastly more attention to the needs and characteristics of learners than some have given.⁶

The writer believes that the responsibility for making out a course of study rests largely with the teacher of agriculture. Of course, he will need help from various personnel in the community competent to assist, but he must finally prepare the course to fit his own views and abilities, and to fill the needs of those who will take it.

An attempt was made to determine the thinking of administrators as to who, in addition to the vocational agriculture teacher, should help determine the course content for vocational agriculture departments. From examining Table XVII, it is evident that of the suggested personnel, the "principal" and "leading farmers in the community" were the personnel selected by most of the respondents. The "principal" was selected by 82 per cent of the respondents, and "leading farmers in community" by 73 per cent. "High-school boys" were selected by 60 per cent, "superintendent of schools" by 52 per cent, and "others"

⁶Hammonds, op. cit., p. 66.

TABLE XVII

SECONDARY SCHOOL ADMINISTRATORS SUGGESTING WHO IN ADDITION
TO VOCATIONAL AGRICULTURE TEACHER SHOULD HELP DETERMINE
COURSE CONTENT FOR VOCATIONAL AGRICULTURE DEPARTMENTS

Who	Administrators Responding	
	Number	Per Cent
1. Principal	90	82
2. High-school boys	66	60
3. Superintendent of schools	57	52
4. Leading farmers in community	80	73
5. Others	9	8

by 8 per cent. Respondents choosing "others" also named them. Their choices and the number of instances for each are: "county agents," three; supervisor of instruction," one; "state supervisor of vocational agriculture," one; "University of Tennessee Agriculture Education Department," one; and "teachers in other areas," one.

V. FACILITIES FOR VOCATIONAL AGRICULTURE

Because of the additional space and facilities required for vocational agriculture as compared to most other courses, it is a problem to secure the equipment and facilities necessary to do an effective job of teaching in some areas of the vocational agriculture program.

A recent committee consisting of vocational agriculture teachers and supervisors formulated evaluative criteria and a supervisory guide for vocational agriculture teachers. It was recommended that the classroom consist of thirty square feet per pupil and other requirements to meet state recommendations, and that it be equipped with conference-type tables and a suitable chair for each pupil in the largest class. The classroom should also be equipped with bookshelves, bulletin files and magazine rack. The shop should be a minimum size of twenty-four hundred square feet, be equipped with electric power accessibility and controls necessary, include a forced-air flue and exhaust fan for welding and forge area, and have the safety equipment necessary. The shop should also have an outside door of sufficient size to admit modern machines common in the area, a door twelve feet high and ten

feet wide with a pedestrian door, washing facilities and tools and equipment necessary to teach needed skills. Office space should be provided either as a separate facility or as a part of the classroom with a minimum of one hundred square feet. Also, sufficient storage space should be provided for tools and equipment.⁷ This is a very brief description of the building facilities considered adequate by this committee.

Table XVIII endeavors to bring out the recommendations of the administrators on the building facilities a vocational agriculture department should have for vocational agriculture use only. Most of the administrators agree with the committee who formulated the criteria on building facilities mentioned in the preceding paragraph. Table XVIII signifies that 99 per cent of respondents indicated that a shop was needed; 99 per cent, a classroom; and 6 per cent, others. Other facilities suggested by the respondents were a plot of ground, additional storage space, and a laboratory.

Further study was conducted to find the recommendations of respondents as to the number of power tools for the farm mechanics shop. Obviously, no shop can be conducted effectively without the proper kinds of equipment in sufficient numbers. Power tools more and more are becoming a part of the farm shop, and students should

⁷ Tennessee Division of Vocational Education, Evaluative Criteria and Supervisory Guide for Vocational Agriculture Teachers (Nashville: Department of Education, 1961), pp. 4-6.

TABLE XVIII

SECONDARY SCHOOL ADMINISTRATORS SUGGESTING BUILDING
FACILITIES NEEDED FOR VOCATIONAL AGRICULTURE
DEPARTMENTS

Facilities	Administrators Responding	
	Number	Per Cent
1. Agriculture shop	109	99
2. Classroom	109	99
3. Office	89	81
4. Toilet	95	86
5. Washroom	100	91
6. Tool room	87	79
7. Others	7	6

know how to use them. Also, they make for more experience in related fields.

The respondents were given an opportunity to designate the power tools which they thought were necessary for a farm mechanics shop. The results are shown in Table XIX. It is understood that in addition to the power tools listed in Table XIX, there should be an adequate supply of small woodworking and metalworking tools.

A very high percentage of respondents indicated that each power tool suggested in Table XIX was necessary. The following woodworking tools were considered essential by the percentages shown: 97 per cent, a table saw; 75 per cent, a shaper; 89 per cent, a band saw; 78 per cent, a jig saw; 91 per cent, a planer; 82 per cent, a jointer; 76 per cent, a wood lathe; and 87 per cent, a power sander. Of the metalworking tools suggested, 90 per cent considered a drill press necessary; 91 per cent, a grinder; 88 per cent, an electric-arc welder; 83 per cent, an acetylene welder; 84 per cent, a blacksmith forge; and 14 per cent, others.

Tools suggested other than the ones listed in Table XIX were sheet metal tools, painting equipment, motor equipment, electric layout, and plumbing equipment. A few respondents made the following comments:

You will need all you can get and house adequately.

The number of tools should be determined by study of objectives and needs.

TABLE XIX

SECONDARY SCHOOL ADMINISTRATORS INDICATING POWER
TOOLS NEEDED FOR FARM MECHANICS SHOP

Item	Administrators Responding	
	Number	Per Cent
I. Woodworking		
1. Table saw	107	97
2. Shaper	82	75
3. Band saw	98	89
4. Jig saw	86	78
5. Planer	100	91
6. Jointer	90	82
7. Wood lathe	84	76
8. Sander	96	87
9. Others	4	4
II. Metal working		
1. Drill press	99	90
2. Grinder	100	91
3. Electric-arc welder	97	88
4. Acetylene welder	91	83
5. Blacksmith forge	92	84
6. Others	15	14

At present, the financing of vocational agriculture departments is divided among local, state, and federal funds. Providing facilities for, and maintaining vocational agriculture departments are responsibilities of local boards of education. However, the vocational agriculture teachers' salary supplements for out-of-school programs and travel are provided by state and federal funds as provided in the Smith-Hughes Act and Titles I and III of the George-Barden Act.⁸

This study has endeavored to bring out the thinking of the administrators as to who should finance vocational agriculture. An analysis of Table XX reveals the results of this part of the study.

Twenty-three per cent of the one hundred and one administrators who responded to this part of the questionnaire were of the opinion that facilities for vocational agriculture departments should be financed from local sources. "Local" and "state" funds were designated by 15 per cent of the respondents; whereas, "local," "state," and "federal" funds were selected by 35 per cent of the administrators. "Local," "state," "federal," and "other" were selected by 3 per cent of the respondents; "local" and "federal" by 2 per cent; "state" by 11 per cent; "state" and "federal" by 9 per cent; "federal" by 1 per cent; and "other" by 1 per cent.

"Local" sources were designated by 28 per cent of the respondents as preferred funds for maintaining the vocational agriculture department. "Local" and "state" funds were indicated by 14 per cent of the

⁸Tennessee State Board of Vocational Education, op. cit., pp. 2-12.

TABLE XX

SECONDARY SCHOOL ADMINISTRATORS INDICATING WHO SHOULD
FINANCE VOCATIONAL AGRICULTURE

Item	Per Cent Administrators Responding								
	Local			State			Federal		
	Local	State	Federal	Local	State	Federal	Local	State	Other
1. Facilities for vocational agriculture department	23	15	35	3	2	11	9	1	1
2. Maintaining vocational agriculture department	28	14	32	1	3	9	9	3	1
3. Vocational agriculture teachers' salary supplements	7	14	40	3	1	16	13	5	1
4. Vocational agriculture teachers' travel	10	16	2	1	0	35	18	14	4

administrators; "local," "state" and "federal" by 32 per cent; "local," "state," "federal," and "other" by 1 per cent; "local" and "federal" by 3 per cent; "state" by 9 per cent; "state" and "federal" by 9 per cent; "federal" by 3 per cent; and "other" by 1 per cent of the respondents.

Only 7 per cent of the respondents thought that local funds should be the only funds used to pay the vocational agriculture teachers' salary supplements; whereas, 14 per cent of the administrators indicated that local and state funds should be used. Forty per cent of the administrators thought that local, state, and federal funds should be used to supplement the vocational agriculture teachers' salaries. "Local, "state," "federal" and "other" were indicated as proper sources by 3 per cent of the respondents; "local" and "federal" by 1 per cent; "state" by 16 per cent; "state" and "federal" by 13 per cent; "federal" by 5 per cent; and "other" by 1 per cent.

"Local" funds were indicated as the only source for vocational agriculture teachers' travel by 10 per cent of the respondents. "Local" and "state" funds were specified by 16 per cent of the administrators; "local," "state," and "federal" by 2 per cent; "local," "state," "federal," and "other" by 1 per cent; "state" by 35 per cent; "state" and "federal" by 18 per cent; "federal" by 14 per cent; and "other" by 4 per cent of the respondents.

It should be pointed out that vocational agriculture teachers receive mileage only for those supervisory and coordinating functions

interpreted as essential for effective instruction, such as on-farm visits and district FFA meetings. No mileage is received for those functions that other teachers are asked to perform, such as teachers' meetings, as well as going to and from school and ball games. This may not have been clear to a few administrators who had the following comments to make concerning financing:

He should receive mileage only if travel is spent after normal school day.

Travel pay for project visits only.

Vo-ag teachers should be on same par.

None, unless applicable to all teachers. All teachers in the school should have travel expenses. This is not democratic.

VI. FUTURE FARMERS OF AMERICA

Future Farmers of America, or FFA as it is commonly known, is the national organization of boys and young men regularly enrolled in vocational agriculture in the public high schools under the provisions of the vocational education acts. The organization came into existence in 1928, eleven years after the Smith-Hughes Act was passed. The average age of active FFA members is approximately seventeen years; twenty-five years is the maximum age of active members, with retention of active membership being permitted up to this age for those who have been out of high school less than three years.⁹

⁹Hammonds, op. cit., p. 229.

FFA is an integral part of the program of vocational education in agriculture. It seems to motivate, vitalize, and supplement the systematic instruction in agriculture. Included in the things FFA members learn through participation are: (1) the parliamentary procedure necessary to conduct and take part in a public meeting, (2) to speak in public, (3) to buy and sell, (4) to finance themselves and otherwise work cooperatively, (5) to assume civic responsibility, and (6) to provide recreation for themselves and others in the community. The foundations on which the organization is built includes leadership and character development, sportsmanship, cooperation, service, thrift, scholarship, improved agriculture, organized recreation, citizenship, and patriotism.¹⁰

The organization is designed to be truly democratic and is the largest and most proficient farm boy organization in the world.

There are two main types of activities in which FFA members engage. Each type includes many activities in the many phases of agriculture and rural leadership. One of these types is competitive activities, such as livestock judging and parliamentary procedure contests. The other is cooperative activities, such as community livestock improvement and other community improvement programs. An attempt was made to find the thinking of the administrators as to which type of these activities should receive the greater emphasis in

¹⁰
Ibid., p. 230.

FFA work. Table XXI tabulates the results of this endeavor.

"Participation in cooperative activities. . ." was chosen by 88 per cent of the respondents as the type of activity which should receive the greater emphasis. Table XXI shows 12 per cent of the administrators as having chosen "participation in competitive activities. . ." to receive the greater emphasis.

VII. SUPERVISED FARMING PROGRAMS

Deyoe, in his book, Supervised Farming in Vocational Agriculture, quotes R. W. Stimson, father of supervised farming, in connection with vocational education in agriculture with the following statement:

It is believed that the project method of bringing agricultural science immediately to bear on the actual farm practice is a promising solution of our most pressing problem in the field of vocational training.¹¹

He made this statement in 1912. Deyoe also states, "In 1908, Mr. Stimson originated and started the 'home project' plan of teaching agriculture which to this day is perhaps the most distinctive feature of supervised farming programs."¹²

A complete supervised farming program includes productive enterprises, improvement projects, and supplementary practices. Students in vocational agriculture are encouraged not only to carry complete super-

¹¹George P. Deyoe, Supervised Farming in Vocational Agriculture (Danville, Illinois: The Interstate Printers and Publishers, 1943), p. 46.

¹²Ibid., p. 48.

TABLE XXI

SECONDARY SCHOOL ADMINISTRATORS INDICATING TYPE OF
ACTIVITY TO RECEIVE THE GREATER EMPHASIS IN
FUTURE FARMERS OF AMERICA WORK

<u>Activity</u>	<u>Administrators Responding</u>	
	<u>Number</u>	<u>Per Cent</u>
1. Participation in competitive activities, such as livestock judging contests, etc.	12	12
2. Participation in cooperative activities, such as community livestock improvement programs, etc.	89	88

vised farming programs, but also to carry programs that are balanced in areas where balance is desirable. This means to include both livestock enterprises and crop enterprises which can be used for feed.

Administrators were asked to give their opinions as to the relative value of supervised farming programs as carried out in their schools. An analysis of Table XXII reveals their opinions.

Table XXII shows that, of the eighty-four administrators responding, 90 per cent indicated that supervised farming programs in their schools are either of great or moderate value, with 48 per cent indicating that they were of great value, and 42 per cent specifying that they were of moderate value. Ten per cent stated that they were of little or no value.

This study further attempts to find the thinking of the respondents on whether each vocational agriculture student should be required to carry out one or more projects in a supervised farming program. Of the one hundred and nine respondents, 98 per cent indicated that each student should be required to carry out a supervised farming program as indicated in Table XXIII. Only 2 per cent specified that it should not be required. This is not entirely parallel to the opinions expressed in Table XXII, which shows that 10 per cent indicated that supervised farming programs in their schools were of little or no value.

The respondents were further asked why the students should or should not be required to carry out a supervised farming program. Here are some of their answers:

TABLE XXII

OPINIONS EXPRESSED BY SECONDARY SCHOOL ADMINISTRATORS
AS TO THE RELATIVE VALUE OF SUPERVISED FARMING
PROGRAMS AS CARRIED OUT IN THEIR SCHOOLS

<u>Items</u>	<u>Administrators Responding</u>	
	<u>Number</u>	<u>Per Cent</u>
1. Great value to student	40	48
2. Moderate value	35	42
3. Little or no value	9	10

TABLE XXIII

SECONDARY SCHOOL ADMINISTRATORS INDICATING WHETHER A
STUDENT SHOULD BE REQUIRED TO CARRY OUT A
SUPERVISED FARMING PROGRAM

<u>Item</u>	<u>Administrators Responding</u>	
	<u>Number</u>	<u>Per Cent</u>
1. Yes	107	98
2. No	2	2

One of the main aspects of the course.

If a student is not interested in carrying a program, then he should not be in vo-ag.

Only those really interested.

Learn by doing.

We learn to do things this way.

Helps to develop farming skills and develop sense of responsibility.

Experience in scientific farming.

Relate classroom activities to actual practice.

Excellent learning situation.

Actual experience on the job.

For practical experience and income.

Experience is necessary in any field.

Invaluable experience is gained by those who really do them.

I feel the project is too much the decision of the teacher. Yet I feel the most value comes from these programs due to experience gained. A project should not bar a student from taking agriculture.

Vo-ag is no loafing place for poor learners. Doing is the most important part of learning.

Gives the boy a continuing program and pride of ownership.

If it's ag., let's have farming.

First hand experience.

Deyoe states that there is no arbitrary answer as to "when" and "how often" supervisory visits should be made. He says the need for the visits should be sufficient to justify the time and expense involved.

This need is likely to be greater for first-year students than for other students. He further states that a fair approximation is an average of one visit every one or two months, varying in accordance with the needs arising from the program of supervised farming and with the ability of the individual student to cope satisfactorily with situations as they arise in developing the program.¹³

The State of Tennessee Plan for Vocational Education states "the maximum enrollment will not be greater than the teacher could reasonably be expected to supervise with six on-farm visits during each year seasonally or at the time that instruction is most needed by the student."¹⁴

Breeding found that the majority of business and professional leaders in Claiborne County thought that the vocational agriculture teacher should make from two to four visits per student per year.¹⁵

Administrators were asked the importance they placed upon on-farm visits by the teacher of vocational agriculture. Table XXIV reflects the opinions of one hundred and eight respondents as to whether it be great, moderate or of little value.

An analysis of Table XXIV shows that 53 per cent of respondents considered the importance of supervisory visits as being great; 45 per cent considered them to be of moderate value; and 2 per cent, of little value.

¹³Ibid., p. 339.

¹⁴Tennessee State Board of Vocational Education, op. cit., p. 19.

¹⁵Breeding, op. cit., p. 61.

TABLE XXIV

IMPORTANCE PLACED BY SECONDARY SCHOOL ADMINISTRATORS
ON SUPERVISORY VISITS BY THE TEACHER OF
VOCATIONAL AGRICULTURE

Value	Administrators Responding	
	Number	Per Cent
1. Great	57	53
2. Moderate	49	45
3. Little	2	2

It is quite significant that 98 per cent of the administrators considered these visits important. However, the writer thinks that vocational agriculture teachers should strive to make the quality of their supervision such as to warrant even higher consideration of it by their administrators. Perhaps administrators should be better informed as to their value.

VIII. VOCATIONAL AGRICULTURE TEACHER LOAD

Cook states in his book, A Handbook on Teaching Vocational Agriculture, that an agricultural instructor must be willing to cooperate with the school officials at all times. He should realize that he is a part of the school system and that he must uphold the policies of the school. A school depends not only upon its administrators, but also upon all the teachers in the system. Like a chain, a school system is no stronger than its weakest link.¹⁶

The above statement is by no means an implication by the writer that vocational agriculture teachers in East Tennessee are not cooperative, but it is merely to re-emphasize its importance. On the contrary, the agriculture teachers in many instances render fine service by helping at registration time, helping organize curricula and assist in many other duties.

¹⁶C. C. Cook, A Handbook on Teaching Vocational Agriculture (Danville, Illinois: Interstate Printing Company, 1938), pp. 24-25.

Due to the nature of the course, vocational agriculture teachers must have somewhat lower enrollments than the average teacher. This is necessary in order to give time for supervision of farming programs, teach adult classes, maintain the farm mechanics shop, serve as advisor for the FFA chapter, and to perform other duties.

Breeding found that 88 per cent of the business and professional people in Claiborne County indicated that the vocational agriculture teacher should have no extra duties other than teaching all-day, young and adult farmer classes.¹⁷

The State of Tennessee Plan for Vocational Education states that "the purposes of vocational agriculture are more effectively achieved when a teacher is on a full-time basis with an enrollment of 40 to 60 students and that a teacher who enrolls 60 or more all-day boys shall be employed on a full-time basis."¹⁸

Some administrators recognize the duties of vocational agriculture teachers and are willing to cooperate to the fullest. They consider this program an integral part of the total school program. It is recognized, of course, that vocational agriculture teachers are not the only teachers in most secondary schools who must have limited enrollments in their classes.

¹⁷ Breeding, op. cit., p. 84.

¹⁸ Tennessee State Board of Vocational Education, op. cit., p. 19.

This study has attempted to get the opinions of school administrators as to what academic teaching load a vocational agriculture teacher with sixty boys in his vocational agriculture classes should have. Table XXV is the tabulation of results from the endeavor.

According to forty-three, or 40 per cent, of the one hundred and seven respondents, duties should be devoted to vocational agriculture only, as is shown in Table XXV. Further analysis reveals that 42 per cent of the respondents thought that he should not teach other classes, 44 per cent thought he should have the same teacher-pupil ratio as any other teacher, 34 per cent suggested that he should keep study hall in addition to his vocational agriculture duties, and 69 per cent stated that he should have the same extracurricular duties as any other teacher.

The State of Tennessee Plan for Vocational Education states that "all regular teachers of vocational agriculture will be employed on a twelve months per year basis."¹⁹ This is necessary for the supervision of farming programs during the growing season for many farm enterprises.

Further study was made to determine the suggestions of administrators as to what the vocational agriculture teacher should do during the summer. Table XXVI reveals their opinions on this phase of the vocational agriculture teacher's activities.

¹⁹ Ibid., p. 20.

TABLE XXV

SECONDARY SCHOOL ADMINISTRATORS INDICATING PROPER ACADEMIC
TEACHING LOAD OF A TEACHER HAVING SIXTY BOYS ENROLLED
IN VOCATIONAL AGRICULTURE CLASSES

Load	Administrators Responding	
	Number	Per Cent
1. He should teach the required number of classes of all-day boys and devote the remainder of time to visitations, shop and classroom maintenance, teaching adult classes, and other duties pertaining to vocational agriculture.	43	40
2. He should not teach other academic courses.	45	42
3. He should have same teacher-pupil ratio as any other teacher in school.	47	44
4. He should keep study hall in addition to his vocational agriculture classes.	36	34
5. He should do the same number of extra-curricular activities as any other teacher--class sponsorship, take up tickets at ball games, etc.	72	69
6. Others	0	0

TABLE XXVI

SECONDARY SCHOOL ADMINISTRATORS INDICATING WHAT
VOCATIONAL AGRICULTURE TEACHERS SHOULD
DO DURING THE SUMMER

Items	Administrators Responding	
	Number	Per Cent
1. He should do a large part of the supervision of farming projects.	102	96
2. He should use this time for getting the vocational agriculture department ready for the coming school year.	68	64
3. He should organize his long-time programs of work during this period.	67	63
4. He should use this time for professional improvement, such as summer school.	67	63
5. He should not be employed during the summer.	6	6

An analysis of Table XXVI shows that 96 per cent of the respondents thought that a teacher should do a large part of the supervision of the supervised farming programs during the summer. The job of getting his department ready for the coming school year was suggested as a job to do during the summer by 64 per cent of the respondents. Sixty-three per cent suggested that he should plan his program of work during the summer, and 63 per cent suggested that he should use this time for professional improvement. It is noted by the writer that 6 per cent indicated that teacher should not be employed during the summer, while 96 per cent stated that he should supervise his farming programs. It seems that 2 per cent thought he should perform this duty without pay. FFA camp was suggested by one respondent as a summer duty.

One respondent stated that vocational agriculture teachers should not be employed during the summer unless other teachers were.

IX. YOUNG AND ADULT FARMER PROGRAM

Hammonds states that "departments of vocational agriculture should provide the needed instruction for those who have entered and those who are preparing to enter the work of the farm." He further states, "The national acts for vocational education provide for systematic instruction in agriculture of less than college level for young men not in school and for adult farmers."²⁰

²⁰Hammonds, op. cit., p. 242.

The writer here attempted to find the opinions of administrators as to the types of adult programs that should be taught in their schools or, further still, whether they should be taught. Table XXVII records the results of this effort.

In analyzing Table XXVII, it is shown that 60 per cent of the 85 respondents thought that both young and adult farmer classes should be taught, and 22 per cent thought that adult and young farmer classes should be combined. It is significant to note that 27 per cent indicated that their public schools should not offer vocational agriculture to adult farmers.

Some comments by the respondents were:

Should not teach adult farmers unless they are adequately staffed. A man cannot work all the time and have time to make adequate preparations.

Should not teach adult farmers unless there is a definite desire for the class by the farmers. Too many classes are organized and not attended.

The State of Tennessee Plan for Vocational Education states that adult and young farmer classes should consist of a minimum of ten meetings and not less than twenty hours of organized instruction during the year.²¹ Further study was conducted to determine the opinions of the respondents as to the number of adult and young farmer classes that

²¹Tennessee State Board of Vocational Education, op. cit., p. 22.

TABLE XXVII

SECONDARY SCHOOL ADMINISTRATORS INDICATING TYPE OF
OUT-OF-SCHOOL PROGRAM ADEQUATE FOR THEIR SCHOOLS

Items	Administrators Responding	
	Number	Per Cent
1. Both adult and young farmer classes should be taught.	51	60
2. Adult and young farmer classes should be combined.	19	22
3. Public schools should not teach agriculture to young and adult farmers.	23	27
4. Others	0	0

a vocational agriculture teacher should teach per year.

Table XXVIII reveals that 40 per cent of the one hundred and four respondents indicated that a vocational agriculture teacher should teach one class; 26 per cent specified two classes; 9 per cent, three classes; 6 per cent, four or more classes; and 18 per cent specified that he should not teach any adult classes.

Here again, you will note a slight inconsistency in that Table XXVII shows that 27 per cent of the respondents thought that vocational agriculture should not be offered to adult and young farmers; whereas, Table XXVIII indicates that only 19 per cent specified that no adult classes should be taught. A partial explanation of this is that respondents answering the part of inquiry that applies to Table XXVII did not answer the part pertaining to Table XXVIII.

X. INCREASED INDUSTRY

Some sections of East Tennessee are becoming industrialized to varying degrees. It is assumed that it may have an effect on vocational agriculture. Breeding found that 96 per cent of the business and professional people in Claiborne County believed vocational agriculture should continue to be offered if that county became industrialized.²²

An attempt was made to find the opinions of the administrators as to how increased industry would affect vocational agriculture.

²²Breeding, op. cit., p. 90.

TABLE XXVIII

SECONDARY SCHOOL ADMINISTRATORS INDICATING NUMBER OF ADULT
AND YOUNG FARMER CLASSES A VOCATIONAL AGRICULTURE
TEACHER WITH SIXTY BOYS IN HIS HIGH-SCHOOL
CLASSES SHOULD TRY TO TEACH

Classes	Administrators Responding	
	Number	Per Cent
1. One	42	40
2. Two	27	26
3. Three	9	9
4. Four	6	6
5. None	20	18

Table XXIX reveals that 71 per cent of the one hundred and five respondents indicated that it would reduce the number of boys taking vocational agriculture; 46 per cent stated that it would require more intensive training for vocational agriculture students because agriculture is becoming more technical; 53 per cent believed that it would require more relating agriculture to industry; and 24 per cent thought that it would eliminate the need for teaching vocational agriculture.

XI. EVALUATION

Hamlin states in his book, The Community Program of Agricultural Education, that a program in education seldom rises higher than the standards set for it. Some of the key people in setting these standards are our administrators. Hamlin further states, however, that the appraisal of agricultural education in a community school rests with the general public.²³

An effort was made to determine the criteria administrators used in evaluating their vocational agriculture departments. They were asked to check as many of the suggested items listed in Table XXX as they considered applicable and rank according to their importance.

It should be noted here that all respondents answering this part of the questionnaire did not rank items according to their importance, but merely checked items listed in Table XXX that were

²³H. M. Hamlin, The Community Program of Agricultural Education (Champaign, Illinois: Stipes Publishing Company, 1943), p. 75.

TABLE XXIX

SECONDARY SCHOOL ADMINISTRATORS INDICATING EFFECT OF
INCREASED INDUSTRY UPON VOCATIONAL AGRICULTURE

Item	Administrators Responding	
	Number	Per Cent
1. Reduce the number of boys in your schools taking vocational agriculture.	75	71
2. Require more intensive training for vocational agriculture students because agriculture is becoming more technical.	48	46
3. Require relating agriculture to industry.	56	53
4. Eliminate the necessity for teaching vocational agriculture.	25	24
5. Others	0	0

TABLE XXX

SECONDARY SCHOOL ADMINISTRATORS INDICATING CRITERIA THEY CONSIDER
IN EVALUATING THEIR VOCATIONAL AGRICULTURE DEPARTMENTS

Item	Per Cent Responding	Per cent ranking according to their importance*						
		1st	2nd	3rd	4th	5th	6th	7th
1. What students are able to do as a result of instruction	93	67	12	2	2	2	0	0
2. Number of students enrolled	62	2	17	14	12	0	2	0
3. Attitude of students and parents	81	17	40	29	7	2	0	0
4. Number of former students entering farming and other agricultural occupations	69	2	24	29	5	2	2	0
5. Housekeeping in department	24	0	0	7	10	2	7	0
6. Student reports	27	2	0	10	7	10	2	2
7. Grades earned	19	5	0	0	0	2	2	12
8. Others	12	5	5	2	2	2	0	0

*These percentages were based only on number of respondents ranking them first, second, third, etc.

applicable. Percentages listed under "Per cent ranking according to their importance" were based on the 42 respondents who ranked them.

An analysis of Table XXX reveals that 93 per cent of the eighty-four respondents evaluated their departments on "what students are able to do as a result of instruction." Sixty-seven per cent of them ranked this item first, while 12 per cent ranked it second. Further analysis shows that 2 per cent ranked this item third; 2 per cent, fourth; and 2 per cent, fifth. The "number of students enrolled" was listed as a factor in evaluation by 62 per cent of the respondents. Principal rankings of this factor were: first, 2 per cent; second, 17 per cent; third, 14 per cent; and fourth, 12 per cent. The "attitude of students and parents" was listed as a factor by 81 per cent of respondents. Seventeen per cent ranked this item first; 40 per cent, second; 29 per cent, third; 7 per cent, fourth; and 2 per cent, fifth. The "number of former students entering farming and other agricultural occupations" was indicated as a factor in evaluation by 69 per cent of respondents with only 2 per cent ranking this item first. Twenty-four per cent ranked this item second; 29 per cent ranked it third; 5 per cent ranked it fourth; 2 per cent, fifth; and 2 per cent, sixth. "Housekeeping in department" was listed as a factor by only 24 per cent of respondents, with none of them ranking it first or second. Seven per cent ranked it third; 10 per cent, fourth; 2 per cent, fifth; and 7 per cent, sixth.

Table XXX further reveals that the student reports were con-

sidered an item of evaluation by 27 per cent of the respondents with 2 per cent ranking it first; 10 per cent ranking it third; 7 per cent, fourth; 10 per cent, fifth; 2 per cent, sixth; and 2 per cent, seventh. Grades earned were thought to be factor by 19 per cent of respondents with 5 per cent ranking this item first. None of the respondents ranked this item either second, third, or fourth, but 2 per cent ranked it fifth. Grades earned were considered sixth by 2 per cent of respondents and seventh by 12 per cent.

Several respondents listed other items which they thought should be considered factors in evaluation. They are revealed in the following quotations:

Damage done to the physical plant by ag. students.

FFA chapter accomplishments.

Fair competition.

Work required by students.

Supervised projects under way.

Long range plans.

Program being carried on.

The administrators were further asked how favorable they considered the over-all results obtained from vocational agriculture in their schools. They were asked to specify whether they considered the results very favorable, favorable, probably worth time and expense involved, unfavorable, or otherwise. Table XXXI shows their ratings of this item.

TABLE XXXI

SECONDARY SCHOOL ADMINISTRATORS INDICATING THE
RESULTS OBTAINED FROM VOCATIONAL AGRICULTURE
IN THEIR SCHOOLS

Results	Administrators Responding	
	Number	Per Cent
1. Very favorable	24	29
2. Favorable	34	40
3. Probably worth time and expense involved	24	29
4. Unfavorable	2	2
5. Others	0	0

An analysis of Table XXXI shows that 29 per cent of the eighty-four respondents thought the results obtained from vocational agriculture to be "very favorable"; 40 per cent indicated that the results were "favorable"; 29 per cent stated that vocational agriculture was "probably worth time and expense involved"; and 2 per cent indicated that results were "unfavorable."

The two respondents who listed the results obtained from vocational agriculture as "unfavorable" had the following comments:

It depends upon the man behind the desk. I have had one excellent man. We then had an excellent department.

Not enough discipline in ag. classes; this applies to the last 5 teachers we have had in ag.

An attempt was made to get the opinions of the respondents as to the extent vocational agriculture contributed to the success of boys who suggested occupations listed in Table XXXII. They were asked to specify whether the course contributed "much," "some," "little," "none," or was a "waste of time."

In tabulating Table XXXII, it is found that 84 per cent of the respondents agree that vocational agriculture contributes "much" to the success of boys who enter farming occupations, while 16 per cent acknowledged that it contributes "some" to their success in this field. Further study reveals that 38 per cent of the respondents indicated that the course contributed "much" to boys who enter agri-industry occupations, while 50 per cent specified that it contributed "some" to boys who enter agri-industry, and 1 per cent indicated "none"

TABLE XXXII

SECONDARY SCHOOL ADMINISTRATORS INDICATING THE EXTENT
VOCATIONAL AGRICULTURE CONTRIBUTES TO THE
SUCCESS OF THOSE WHO ENTER
SUGGESTED OCCUPATIONS

Item	Per Cent Responding				Waste of Time
	Much	Some	Little	None	
1. Farming occupations (such as dairy farming, tobacco farming, etc.)	84	16	0	0	0
2. Agri-Industry occupations (such as feed and seed store workers, farm machinery salesmen, electricians)	38	50	11	1	0
3. Professional careers in agriculture (such as entering college of agriculture, etc.)	61	28	7	0	0
4. Occupations requiring some competency in agriculture (such as rural ministers, rural attorneys, etc.)	26	50	14	2	3

for this item. Of boys who enter professional careers in agriculture, vocational agriculture was thought by 61 per cent of the respondents to contribute "much"; 28 per cent of respondents to contribute "some"; and 7 per cent of respondents to contribute "little." Of boys entering occupations requiring some competency in agriculture, 26 per cent thought the course contributed "much"; 50 per cent thought it contributed "some"; 14 per cent, "little"; 2 per cent, "none"; and 3 per cent thought it a "waste of time."

CHAPTER III

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

I. SUMMARY

This study was made in an attempt to determine both the appraisals and recommendations for improvement of the program of vocational agriculture in East Tennessee by secondary-school administrators in this area.

One hundred and fifty-four questionnaires were mailed to selected superintendents and principals throughout East Tennessee, with a resulting one hundred and ten usable responses. It is felt that the data collected may be instrumental in bringing about better understanding and coordination of efforts between administrators and vocational agriculture teachers which will make for a more effective program of vocational agriculture in this area.

The following is a summary of the findings:

1. The superintendents had tenures as school administrators that averaged 8.5 years and principals had an average tenure as administrators of 11.3 years.

2. Sixty-five per cent indicated that they were born and reared on a farm, and 41 per cent stated that they have owned or now own a farm.

3. Thirty-nine per cent of the administrators indicated that they were former students of vocational agriculture, and 77 per cent

had served as administrators where vocational agriculture was taught. Ten per cent were former teachers of vocational agriculture.

4. Thirty-five per cent of the respondents stated that the effective use of the technical "know-how" in agriculture affected the economy of this area to a great extent, and 55 per cent indicated the economy was affected to a moderate extent.

5. High-school vocational agriculture was specified as needed training to do an efficient job of farming by 84 per cent of the respondents.

6. Sixty-four per cent indicated that a full four-year course should be offered in their schools.

7. Seventy-five per cent of the respondents who had vocational agriculture in their schools indicated that there was a definite need for the program.

8. Eighty-one per cent of those who had vocational agriculture as a part of their curricula indicated that it should continue to be offered.

9. Sixty per cent of the respondents who did not offer vocational agriculture specified that there was no significant need for the program.

10. Eighty-six per cent thought that the main purpose of the course was to provide basic training in agriculture, which is applicable to common agricultural occupations.

11. Eighty-four per cent specified that a boy must have facili-

ties to carry out a project or projects acceptable to local teachers of vocational agriculture.

12. The agriculture teacher was selected by over 70 per cent of the respondents to help decide who should enroll in vocational agriculture, along with the school counselor, principal, and the boy himself.

13. Ninety-one per cent stated that course content should be designed to give a general, broad knowledge of agriculture and related fields. That it should be based on present and future needs of the community was indicated by 87 per cent.

14. The principal was selected by 82 per cent of respondents to help the vocational agriculture teacher determine course content.

15. Over 90 per cent indicated that building facilities for vocational agriculture should include shop, classroom, and washroom. Eighty-one per cent indicated that an office was needed, while 79 per cent suggested a tool room.

16. Over 90 per cent of the administrators indicated that the following power tools should be included in the farm mechanics shop: (1) table saw, (2) planer, (3) drill press, and (4) grinder. Over eighty per cent specified the following tools as being necessary: (1) band saw, (2) jointer, (3) sander, (4) electric-arc welder, (5) acetylene welder, and (6) blacksmith forge. The shaper, jig saw, and wood lathe were considered necessary by over 75 per cent of the respondents.

17. Local funds were designated as the only funds to finance vocational agriculture departments by 23 per cent of the respondents, while 40 per cent specified that local, state and federal funds should be used to finance the vocational agriculture teachers' salary supplements.

18. Eighty-eight per cent of the respondents indicated that participation in cooperative activities should receive greater emphasis as compared to competitive activities in Future Farmers of America work.

19. Supervised farming programs were considered to be of great value by 48 per cent of respondents and of moderate value by 42 per cent.

20. Ninety-eight per cent indicated that a student should be required to carry out a supervised farming program.

21. Supervisory visits were considered to be of great value by 53 per cent of the respondents and of moderate value by 45 per cent.

22. Only 40 per cent of the administrators indicated that the duties of a teacher should be devoted entirely to the vocational agriculture program.

23. Ninety-six per cent indicated that the teacher's duties during the summer should be devoted mainly to the supervision of his supervised farming program.

24. Sixty per cent suggested that both young and adult farmer

classes should be taught, but 40 per cent specified that only one per year should be taught.

25. Seventy-one per cent of respondents predicted that increased industry would necessitate reduction of the number of boys taking vocational agriculture.

26. What students are able to accomplish as a result of instruction was considered a criterion in evaluating vocational agriculture by 93 per cent of respondents.

27. Sixty-nine per cent of the administrators declared the results from vocational agriculture favorable.

28. Eighty-four per cent indicated that vocational agriculture contributes much to boys who enter farming occupations. Fifty per cent felt that some good was derived from the course by boys who enter agri-industry occupations, while an additional 38 per cent felt that much was derived.

II. CONCLUSIONS

Upon examining the findings of this study, there is evidence of mixed feelings as to the regards held by East Tennessee administrators for vocational agriculture. It is obvious, however, that most administrators think rather highly of their programs and indicate that vocational agriculture is a necessary part of their curricula.

Based on the careful examination of the findings, the following further conclusions may be reached.

1. Suggestions and evaluations, by and large, are reliable and representative of the group interviewed, although there may have been a few whose opinions may not have been entirely objective.

2. There is less emphasis placed on the value of the adult program by administrators than by vocational agriculture teachers.

3. There is some concern by administrators as to the academic teaching load recommended for vocational agriculture teachers.

4. There are a few misconceptions concerning the teacher's role in the community and the school.

5. Many administrators feel that the vocational agriculture teacher should have more students.

6. Several respondents indicated the desire to help plan the course of study and other aspects of the program.

7. A few respondents indicated that less than four years of agriculture should be offered in their schools.

8. A few of the above conclusions were criticisms voiced by a few of the respondents. However, most of the respondents indicated that vocational agriculture was well justified as a part of their school curricula and that it prescribed to the accepted purposes of the course.

III. RECOMMENDATIONS

Before making further recommendations for the program of vocational agriculture in Tennessee, the writer feels that teachers of agriculture should do their utmost to accomplish the purposes of the

program in their individual schools. It is recognized that recommendations are of little value when not applied to each school situation. The brief recommendations listed herein may be of value to personnel involved in conducting the vocational agriculture program, but they should be studied in light of their own particular situations. Careful review of the findings should be made in order to make more specific recommendations.

The following general recommendations are suggested by the writer after examining the facts in this study:

1. There should be a more complete realization by administrators and agriculture teachers, alike, that vocational agriculture is an integral part of the school curricula, and it merits the same backing and support of the administrators as any other important phase of the curricula.
2. The possibility of broadening vocational agriculture to include agri-business and light mechanics should be considered.
3. Some method of relieving the effect of the comparatively low teacher-pupil ratio that is required for an effective program of vocational agriculture should be considered.
4. A re-evaluation of teaching curricula based on weaknesses listed and suggestions made in this study should be made by teachers.
5. Some administrators should be better informed about the total program. The encouragement of their participating more in planning the course of study and program should be considered. They should be better informed about the teacher's out-of-school activities.

BIBLIOGRAPHY

BIBLIOGRAPHY

- "Ag Is Sound Prepping for College Work," Tennessee Agricultural Education Service Bulletin, University of Tennessee Department of Agricultural Education, 7:19, May, 1961. Citing California Future Farmer, November, 1960.
- Breeding, Clarence H. "Appraisal of Vocational Education in Agriculture in Claiborne County by Business and Professional Leaders." Unpublished Master's thesis, The University of Tennessee, Knoxville, 1960.
- Butler, Jimmy Joe. "Some Guidance Concerns in Vocational Agriculture." Unpublished Master's thesis, The University of Tennessee, Knoxville, 1959.
- Calton, Walter Gene. "The Setting of Vocational Agriculture in Tennessee." Unpublished Master's thesis, The University of Tennessee, Knoxville, 1959.
- Cardozier, V. R., T. J. Horne, and the A. V. A. Research Committee. "Young Farmer Education as Viewed by Superintendents and Principals and Teacher Trainers and Supervisors of Agricultural Education," Summaries of Studies in Agricultural Education, pp. 32-33. United States Department of Health, Education, and Welfare, Vocational Division Bulletin No. 282, Agricultural Series No. 75. Washington: U. S. Government Printing Office, 1960.
- Cook, C. C. A Handbook on Teaching Vocational Agriculture. Danville, Illinois: Interstate Printing Company, 1938.
- Deyoe, George P. Supervised Farming in Vocational Agriculture. Danville, Illinois: The Interstate Printers and Publishers, 1943.
- Hamlin, H. M. The Community Program of Agricultural Education. Champaign, Illinois: Stipes Publishing Company, 1943.
- Hammonds, Carsie. Teaching Agriculture. New York: McGraw-Hill Book Company, 1950.
- State Department of Education. Directory of Public Schools State of Tennessee, 1960-1961. Nashville: State Department of Education, 1960.
- Tennessee Division of Vocational Education. Evaluative Criteria and Supervisory Guide for Vocational Agriculture Teachers. Nashville: Department of Education, 1961.

Tennessee State Board of Vocational Education. State of Tennessee Plan for Vocational Education. Nashville: Tennessee State Board of Vocational Education, 1959.

APPENDIX A

Y. J. McANDREW

DEPARTMENT OF EDUCATION

CORA LEE NEWMAN

Superintendent

JEFFERSON COUNTY

Supervisor

DANDRIDGE, TENNESSEE

Dear Sir:

This letter is to introduce Charles H. Snodderly who is at the present time teaching agriculture at Jefferson High School, Jefferson City, Tenn.

Mr. Snodderly is a native of Jefferson County. He received his Bachelor of Science degree from the University of Tennessee in 1947. He has since been teaching agriculture in Cocke and Jefferson Counties. Mr. Snodderly has completed the work except a thesis necessary for a Master of Science degree in Agricultural Education.

Mr. Snodderly is currently working on his thesis; and he would appreciate it if you would answer the enclosed questionnaire, the results of which will be the basis of his thesis. These questionnaires are being sent to principals and superintendents throughout East Tennessee.

Please return the questionnaire in the enclosed stamped self-addressed envelope at your earliest convenience. Thank you very much for your cooperation.

Yours very truly,

/s/ Y. J. McAndrew

County Superintendent
Jefferson County Schools

APPENDIX B

QUESTIONNAIRE

RECOMMENDATIONS FOR VOCATIONAL AGRICULTURE BY EAST TENNESSEE SECONDARY-SCHOOL ADMINISTRATORS

- I. What experiences have you had as a school administrator? (Check as many as apply and also number of years in each position.)
- ____ A. High-school principal. (Number of years. ____)
 - ____ B. Superintendent of a school system. (Number of years. ____)
 - ____ C. School supervisor. (Number of years. ____)
 - ____ D. Teacher. (Number of years. ____)
 - ____ E. Others. (Specify.)
- II. What experiences have you had in farming? (Check as many as apply.)
- ____ A. Was born and reared on farm.
 - ____ B. Have actually farmed.
 - ____ 1. Full time.
 - ____ 2. Part time.
 - ____ C. Have owned or now own a farm.
 - ____ D. Have lived on farm.
 - ____ E. Others. (Specify.)
- III. What experiences have you had in vocational agriculture? (Check as many as apply.)
- ____ A. Was former student of vocational agriculture. (List number of years. ____)
 - ____ B. Was former vocational agriculture teacher.

- ☐ C. Have worked on the faculty with vocational agriculture teacher.
- ☐ D. Have worked as an administrator where vocational agriculture was taught.
- ☐ E. Have had no experience with vocational agriculture.
- ☐ F. Others. (Specify.)

IV. What training have you had in technical agriculture other than vocational agriculture?

- ☐ A. High-school nonvocational agriculture. (List number of years.)
- ☐ B. College courses in Agriculture.
- ☐ C. Others. (Specify training.)

V. To what extent does the effective use of the technical know-how in agriculture influence the economy of people in this area? (Check one.)

- ☐ A. A very great extent.
- ☐ B. A very moderate extent.
- ☐ C. A very small extent.

VI. How much training in agriculture does a farmer need in order to do an efficient job of farming? (Check as many as apply.)

- ☐ A. High-school vocational agriculture.
- ☐ B. College
- ☐ C. Agriculture Extension Service.
- ☐ D. Soil Conservation Service.

____ E. Others. (Specify.)

VII. How many years of vocational agriculture should be offered in your school or schools?

____ A. Two years.

____ B. Three years.

____ C. Four years.

VIII. Why is vocational agriculture now a part of the curriculum in your school or schools? (Principals and superintendents who have vocational agriculture as part of curricula may check as many as apply.)

____ A. Definite need for the program.

____ B. Federal and/or state aid.

____ C. Tradition.

____ D. Community requests it.

____ E. For low-ability students.

____ F. Have facilities available.

____ G. Others. (Write in reason or reasons)

IX. Do you think that your secondary school or schools should continue vocational agriculture? (Principals and superintendents who have vocational agriculture a part of curricula may check one.)

____ A. Yes.

____ B. No.

Why or why not? (Write in reason or reasons.)

X. If vocational agriculture is not offered, what are the reasons?

(Principals and superintendents who do not have vocational agri-

culture as part of their curricula may check as many as apply.)

- ☐ A. No significant need for the program.
- ☐ B. Lack of facilities.
- ☐ C. Lack of student interest.
- ☐ D. Expense greater than benefits.
- ☐ E. Lack of qualified teachers.
- ☐ F. Too many administrative problems.
- ☐ G. Percentage of school enrollment of farm boys too small.
- ☐ H. Percentage of students entering agriculture too small.
- ☐ I. Others (Write in reason or reasons.)

XI. What major objectives is the program of vocational agriculture in your school or schools attempting to achieve? (Check as many as apply, and then rank in order of their importance -- 1, 2, 3, etc.)

- ☐ A. To provide basic training in agriculture, which is applicable to the common agricultural occupations.
- ☐ B. To provide specific training for farming.
- ☐ C. To prepare students for agriculture college entrance.
- ☐ D. To provide the student with a general, yet practical, knowledge of agriculture.
- ☐ E. Others. (Specify.)

XII. What changes would you suggest if you were to develop a new set of objectives for vocational agriculture?

XIII. In your opinion, should restrictions be placed on boys who wish to enroll in vocational agriculture?

____ A. Yes.

____ B. No.

XIV. If your answer to number XIII was affirmative, what restrictions would you place?

____ A. Must be reared on farm.

____ B. Must have a desire and opportunity to become employed in agricultural work including farming after completing high school.

____ C. Must have facilities to carry out a project or projects acceptable to local teacher of vocational agriculture.

____ D. Must have ability to eventually do acceptable college work.

____ E. Must intend to seek employment in any field after finishing high school.

____ F. Others. (Indicate.)

XV. Who should decide whether a boy should enroll in vocational agriculture? (Check as many as apply.)

	Agr. I	Agr. II	Agr. III	Agr. IV
A. Vo-ag teacher				
B. School counselor				
C. Principal				
D. Boy himself				

XVI. What should be taught in high-school vocational agriculture classes? (Check as many as apply.)

- ☐ A. Course content should be based on boys' farming projects.
- ☐ B. Course content should be based on present and future needs of community.
- ☐ C. Course content should be designed to give a general broad knowledge of agriculture and related fields.
- ☐ D. Others. (Specify.)

XVII. Who, in addition to vocational agriculture teacher, should help determine course content for vocational agriculture departments? (Check as many as apply.)

- ☐ A. Principal.
- ☐ B. High-school boys.
- ☐ C. Superintendent of schools.
- ☐ D. Leading farmers in community.
- ☐ E. Parents.
- ☐ F. Others. (Write in individuals.)

XVIII. What building facilities should a department of vocational agriculture have for vocational agriculture use only? (Check as many as apply.)

- ☐ A. Agriculture shop.
- ☐ B. Classroom.
- ☐ C. Office.
- ☐ D. Toilet.
- ☐ E. Washroom.

____ F. Tool room.

____ G. Others. (Specify.)

XIX. In addition to an adequate supply of small woodworking tools for boys enrolled, what power tools should be provided? (Check only those needed.)

A. Woodworking

____ 1. Table saw.

____ 2. Shaper,

____ 3. Band saw.

____ 4. Jig saw.

____ 5. Planes.

____ 6. Jointer.

____ 7. Wood lathe.

____ 8. Sanders.

____ 9. Others. (Specify.)

B. Metalworking

____ 1. Drill press.

____ 2. Grinder. (At least one.)

____ 3. Electric-arc welder.

____ 4. Acetylene welder.

____ 5. Blacksmith forge.

____ 6. Others. (Specify.)

XX. Who do you think should finance vocational agriculture? (Check as many as apply.)

	State	Federal	Other	Local
A. Providing facilities for vo-ag dept.				
B. Maintaining vo-ag dept.				
C. Vo-ag teachers' salary supplements				
D. Vo-ag teachers' travel				

XXI. Which activities should be given the greater emphasis in Future Farmers of America work? (Check one.)

_____ A. Participation in competitive activities, such as livestock contests, etc.

_____ B. Participation in cooperative activities, such as community livestock improvement programs, etc.

XXII. What is the relative value of supervised farming programs or projects as actually carried out today in your high school or schools? (Check one.)

_____ A. Great value to student.

_____ B. Moderate value.

_____ C. Little or no value.

XXIII. Should each vocational agriculture student be required to carry out one or more projects in a supervised farming program? (Check one.)

_____ A. Yes.

_____ B. No.

Why or why not? (Write in reason or reasons.)

XXIV. What should your vocational agriculture teacher or teachers do during the summer?

- ☐ A. He should do a large part of the supervision of farming projects during summer.
- ☐ B. He should use this time for getting the vocational agriculture department ready for the coming school year.
- ☐ C. He should organize his long-time programs of work during this period.
- ☐ D. He should use this time for professional improvement such as summer school.
- ☐ E. He should not be employed during the summer.
- ☐ F. Others. (Specify.)

XXV. What academic teaching load should a vocational agriculture teacher with sixty boys enrolled in his vocational agriculture classes have? (Check as many as apply.)

- ☐ A. He should teach the required number of classes of all-day boys with the remainder of time devoted to visitations, shop and classroom maintenance, teaching adult classes--duties pertaining to vocational agriculture.
- ☐ B. He should not teach other academic courses.
- ☐ C. He should have the same teacher-pupil ratio as any other teacher in school.

____ D. He should keep study hall in addition to his vocational agriculture classes.

____ E. He should do the same number of extracurricular activities as any other teacher--sponsorship, take up tickets at ball games, etc.

____ F. Others. (Indicate.)

XXVI. How important do you consider on-farm visits by the teacher of vocational agriculture?

____ A. Great.

____ B. Moderate.

____ C. Very little.

XXVII. How will new or increased industry affect vocational agriculture?

(Check as many as apply.)

____ A. Reduce the number of boys in your school or schools taking vocational agriculture.

____ B. Require more intensive training for vocational agriculture students because agriculture is becoming more technical.

____ C. Require relating of agriculture to industry.

____ D. Eliminate the necessity of teaching vocational agriculture.

____ E. Others. (Specify.)

XXVIII. What sort of out-of-school program in agriculture do you consider adequate for your vocational agriculture department or departments?

(Check as many as apply.)

- ☐ A. Both adult and young farmer classes should be taught.
- ☐ B. Adult and young farmer classes should be combined.
- ☐ C. Public schools should not teach agriculture to adult farmers.
- ☐ D. Others. (Specify.)

XXIX. How many adult classes should a vocational agriculture teacher with sixty boys in his high-school classes try to teach? (Check one.) Note: Assume for each class at least ten meetings and not less than twenty hours of instruction.

- ☐ A. One.
- ☐ B. Two.
- ☐ C. Three.
- ☐ D. Four or more.
- ☐ E. None.

XXX. What factors do you consider in determining the value of your vocational agriculture department or departments? (Check as many as apply, and then rank in order of their importance--1, 2, 3, etc.)

- ☐ A. What students are able to do as a result of instruction.
- ☐ B. Number of students enrolled (teacher load).
- ☐ C. Attitude of students and parents and others.
- ☐ D. Number of former students entering other agricultural occupations.
- ☐ E. Housekeeping in department.
- ☐ F. Student reports.

____ G. Grades earned.

____ H. Others. (Specify.)

XXXI. Do you think the over-all results obtained from vocational agriculture in your school or schools are favorable? (Check one.)

____ A. Very favorable.

____ B. Favorable.

____ C. Probably worth time and expense involved.

____ D. Unfavorable.

____ E. Other. (Specify.)

XXXII. To what extent should vocational agriculture contribute to success of the following occupations?

Occupational Area	Much	Some	Little	None	Waste of Time
A. Farming occupations, (such as dairy farming, livestock farming, tobacco farming, etc.)					
B. Agri-industry occupations other than farming, such as feed and seed store workers, servicemen, electricians, etc.					
C. Professional careers in agriculture, such as entering college of agriculture, etc.					
D. Occupations requiring some competency in agriculture, such as rural ministers, rural attorneys, etc.					