A STUDY OF AGRICULTURAL EDUCATION

IN THE SMALL HIGH SCHOOLS OF OKLAHOMA

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TO

My Wife, Doris

This Work is Affectionately

Dedicated

ACKNOWLEDGMENT

The writer wishes to thank all those who have assisted and encouraged him in the completion of this thesis. He is especially indebted to Dr. M. R. Chauncey, Head of the Department of Secondary Education, and Dr. D. C. McIntosh, Head of the Graduate School, Oklahoma Agricultural and Mechanical College.

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AGRICULTURAL EDUCATION IN THE SMALL HIGH SCHOOLS OF OKLAHOMA

CHAPTER I

INTRODUCTION

For a number of years the writer has watched boys and girls who live in our rural communities accept farming and home making as their future occupation. The writer discussed with many of these young farmers during the past fifteen years the question of "Agricultural Education in the Small High Schools." The majority of these young farmers stated to him that their respective high schools did not offer any agricultural training and as a result they had been deprived of an opportunity which they felt very necessary toward their success. The writer became interested in the fact that so many of the rural boys and girls expressed the idea that the high schools were failing to meet the needs of agricultural education. He decided to make this study for the purpose of finding the exact conditions that exist in our present small high schools in regard to agricultural education and to investigate some of the curriculum changes that are being suggested today by our leading educators. The body of this thesis deals primarily with the lack of interest in agricultural education as manifested in the small high school curriculums of Oklahoma.

The author has noticed the interest that the federal government has taken in the solution of this problem through its participation in the vocational agricultural program. The federal government is now participating in an adult educational program, known as The Veterans' Vocational Agriculture.

The writer is not attempting in this study to answer the question of "federal participation in education". He is not attempting to prove that a lack of agricultural training is the only weak spot in our high school

curriculum or that we should spend more time in improving this phase than we should spend in improving other phases of the public school program.

The United States census report for 1940 shows that over eighty per cent of all people employed in the rural areas of Oklahoma were engaged in some kind of agricultural work. The same report shows that only fifteen per cent of our rural population finish high school and five per cent go to college. We readily see that the high school has a great opportunity and responsibility in helping to solve this problem because of the large per cent of boys and girls who never go to college or finish high school. The high school has a challenge to furnish the necessary training to the students while they are in school.

PURPOSE OF THIS STUDY

The writer has noticed that a very small percentage of the rural high school boys have received the benefits of the vocational agricultural education program. The writer has often wondered why many school administrators did not offer any alternative plan in their respective schools for agricultural training after they have discovered that they cannot qualify for vocational agriculture. The purpose of this study is to find the reasons why more agricultural training is not being offered in our small high schools and to study some of the possible solutions of this problem. The explicit questions for study are as follows:

(1) Does the Oklahoma high school curriculum reveal a lack of interest in agricultural education?

(2) Why more agricultural training is not being offered in the small Oklahoma high schools?

(3) How can the local and state policies be adjusted so that the

small high school curriculum will more nearly meet the present needs of agricultural education?

DEFINITION OF TERMS

1. Curriculum may be defined as all the experiences which pupils have while under the direction of the school.

2. Agricultural education refers to vocational, general, 4-H Club work, F.F.A. work, or any other methods which the high school might use for agricultural training.

Note: The high schools of Oklahoma that are members of the North Central Association were omitted in this study.

METHODS OF PROCEDURE

To secure the data used in this study, the writer obtained all the information possible through the records of the State Vocational Agricultural Department, State Department of Education, interviews with faculty members in the Vocational Education Department a t Oklahoma Agricultural and Mechanical College. The writer also used the United States census report for 1940, Annual High School Bulletin for 1945, and Biennial Reports of the State Superintendent of Public Instruction.

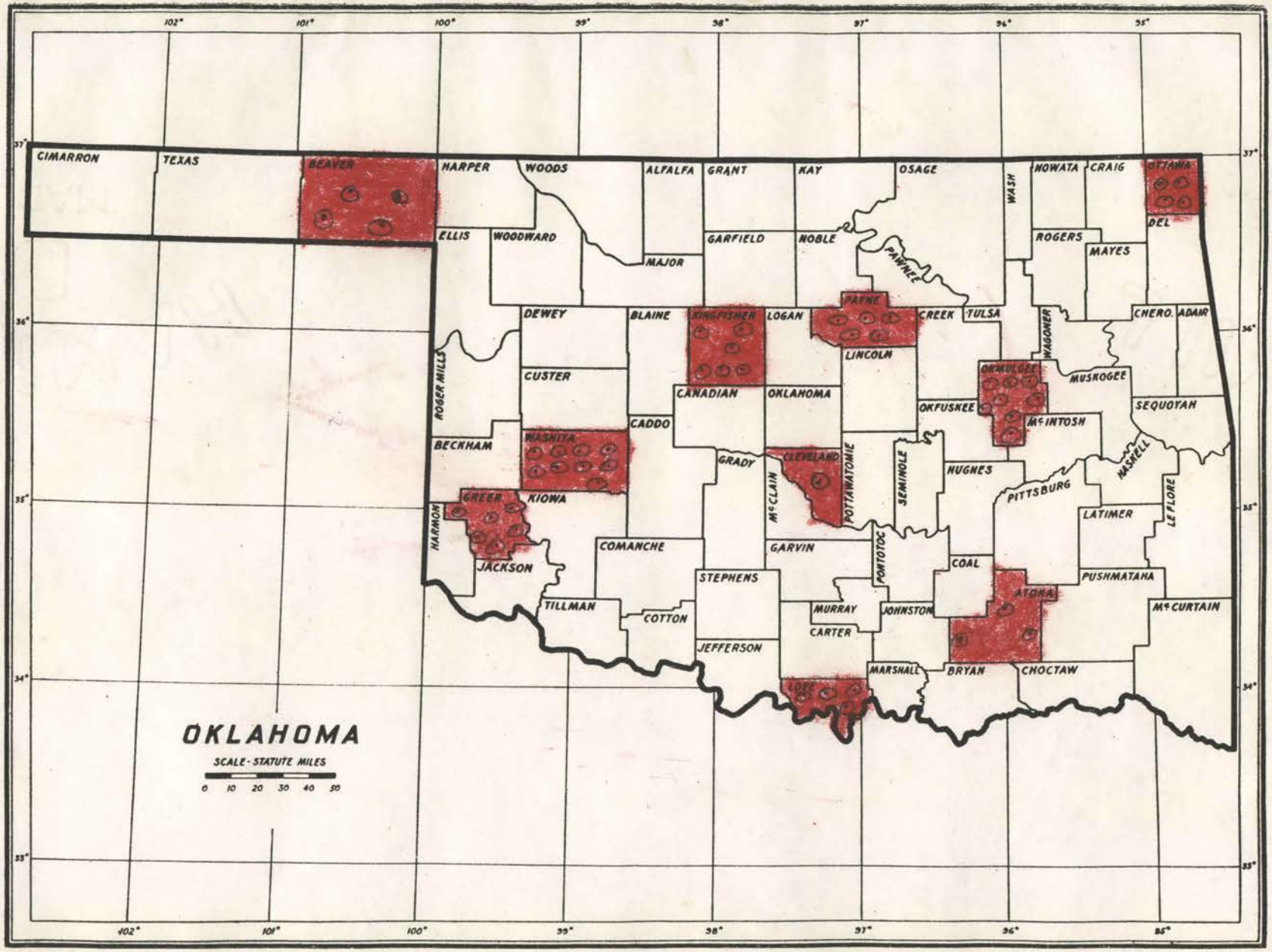
The questionnaire method was also used in securing information and a copy of the questionnaire is included in this report.

Since the high school superintendents have a great responsibility in the making of the school curriculum, I chose to contact all the superintendents in ten counties located in various parts of the state. The counties selected were well distributed over the state so that the results obtained would give a more definite picture of conditions in agricultural education over the entire state. The schools that were members of the

North Central Association were omitted since conditions in those schools are generally accepted to be satisfactory.

This survey included a total of eighty schools. I received fifty replies from the eighty superintendents. I think that the results from these fifty schools will give a fairly accurate picture of the existing conditions in agricultural education.

A map showing the location of the various schools, a list of the schools by counties, and a copy of the questionnaire follow.



Distribution of Schools Studied

Schools by Counties in which the Survey was Made

Beaver County

- Beaver
- Gates
- Balko
- Bethany

Cleveland County

- Lexington

Greer County

- Brinkman
- Lake Creek
- City View
- Reed
- Ocena
- Central View

Okmulgee County

- Beggs
- Wheatley
- Dewar
- Morris
- Bryant
- Wilson
- Muyaka
- Twin Hills

Payne County

- Glenco
- Quay
- Ripley
- Norfolk
- Eureka

Kingfisher County

- Ocarche
- Booker T. Washington
- Dunbar
- Big Four
- Omega
- Douglas

Atoka County

- Dunbar
- Caney
- Tushka

Love County

- Douglas
- Burneyville
- Greenville
- Courtney

Ottawa County

- Afton
- Commerce
- Pitcher
- Wyandotte

Washita County

- Cordell
- Dill City
- Rocky
- Sentinel
- Cloud Chief
- Colony
- Corn
- Lake Valley
- Port

Questionnaire

I. Do you offer Vocational Agriculture in your school? If not, underline your reasons from the suggestions given below, or state your reasons in (e) below.

a. We have less than 24 boys that would take this course, therefore we would be eliminated because of the State and Federal Policy.

b. State and Federal reimbursement in finance too small.

c. Because the State Department's policy is to employ teachers on a full time basis, which is to say for teaching Vocational Agriculture only.

d. Failure to secure teachers who have a Vocational Certificate.

e. Other reasons:

II. Do you offer in your high school a course in General Agriculture for which credit is given? If not, underline your reasons from the suggestions given below or state your reasons in (g) below.

a. Failure to secure teachers who have teaching fields in general agriculture. (12 hours)

b. Lack of finance to equip a laboratory.

c. Suitable textbooks are not available to cover the different units needed for a full nine months' course.

d. Not enough interest among the students if a course were offered.

e. Farming is not a major enterprise in this community; therefore the demand for agriculture is not great enough to justify a course.

f. We offer Vocational Agriculture; therefore General Agriculture would not be needed.

g. Other reasons:

III. Would you offer a course in General Agriculture if the conditions were met satisfactorily that you gave in question No. 2?

IV. If you offered a course in General Agriculture, would you make it an elective course for girls?

V. How many boys are enrolled in your high school?

VI. How many boys are taking agriculture, either Vocational or General?

VII. If you offer any agriculture in your high school, do you offer it as an elective?

VIII. If you offer a course in General Agriculture, do you have an extra period for laboratory, actual experience, and observation?

Questionnaire (cont'd.)

IX. If you offer a course in General Agriculture, do you use regular textbook alone, regular textbook plus supplementary material, or make your own textbook from various materials?

X. Do you think that more teachers and prospective teachers should at least take enough training in agriculture to qualify them to teach a course in general agriculture?

XI. Do you have a 4-H Club in your high school?

XII. How many high school boys are enrolled in 4-H Club?

XIII. How many college hours in agriculture does your sponsor for boys 4-H Club have?

XIV. How many hours per week are devoted to the study of definite agricultural problems in science or other courses?

XV. How many high school boys enrolled in the courses mentioned in question XIV?

XVI. Do you think that a course in General Agriculture would be as profitable as a course in algebra or Latin?

XVII. How many boys in your high school would take a course in General Agriculture if one were offered? (a) Your opinion; (b) answers from the boys.

CHAPTER II

PRESENTATION AND ANALYSIS OF DATA

The first step was to find whether a lack of interest existed in the Oklahoma high schools. A survey was made of all Oklahoma high schools (North Central schools excepted). The Annual High School Bulletin for June 30, 1945, was used for the purpose of finding the number of high schools in Oklahoma that offered agriculture. Records from the State Department of Vocational Agriculture were used to find the number of schools that offered vocational agriculture. From this data, the writer calculated the number of schools not offering any agriculture, and the percentage of the total high schools not offering any agriculture. The presentation and analysis of data will be discussed under the following main divisions:

(1) Existing conditions of agricultural education in all the small Oklahoma high schools during the 1944-45 term.

(2) Existing conditions in agricultural education within the fifty high schools of the survey during the 1945-46 term.

(3) Why more agricultural training is not being offered in all the small Oklahoma high schools.

(a) Reasons given by the school superintendents.

(b) Student interests in agricultural education.

(c) Finance in agricultural education.

(d) The importance of agricultural education.

(e) The school administrators' part in agricultural education.

1. Existing Conditions of Agricultural Education in All the Oklahoma Small High Schools During the 1944-45 Term.

TABLE I

Total Amount of Agricultural Education Offered in All High Schools of Oklahoma During the 1944-45 Term*

Accredited High Schools	Number of Schools Offering Vocational Agri.	Number of Schools Offering General Agri.	Total Number of Schools Offering Either Voc. or Gen.
White 757	162	118	280
Colored 92	23	22	45
Total 849	185	141	325

Schools Not Offering Any Agriculture	Per Cent Not Offering Any Agriculture	Per Cent of High Schools Offering Vocational Agri.	Per Cent of High Schools Offering General Agri.
White 477	63.0	21.4	15.6
Colored 47	51.0	25.0	24.0
Total 524	61.6	21.8	16.6

We see from the foregoing data that 61.6 per cent of the Oklahoma high schools are not offering any accredited agriculture. We notice that only 325 of the 849 high schools offer any agriculture. We can see that the vocational agricultural program has only reached 21.8 per cent of the high schools and that general agriculture has reached 16.6 per cent of the high schools. Only 38.4 per cent of our schools offer any agriculture.

*Data from the Annual High School Bulletin June 30, 1945, and records from the Vocational Agricultural Department, June 1, 1946.

The second aim was to find the distribution of total units of agriculture offered in all high schools of Oklahoma, (North Central excepted). The Annual High School Bulletin was again used. This procedure further reveals the extent that agriculture was being offered. The results of this table are recorded in Table II.

TABLE II

Distribution of Total Units of Agriculture Offered in All Oklahoma High Schools (North Central Schools Excepted) During 1944-45 Term*

Total Number of Schools Offering One-half Unit Only of Agri.	Total Number of Schools Offering One Unit Only	Total Number of Schools Offering From 2 to 4 Units	Total Number of Schools Offering Five Units
29	143	151	2

We see from the above data that only 153 of the 849 accredited high schools are offering more than one unit. Twenty-nine schools are offering only one-half unit, and 143 are offering only one unit. This is a further proof that there is a lack of interest in agricultural educatioh.

The writer decided to further investigate the agricultural interests in the total high school curriculums by making a comparison of the total units taught in agriculture with the total units taught in home economics and mathematics. The Annual High School Bulletin for 1945 was used again. The results of this discovery are shown in Table III.

*Data from the Annual High School Bulletin, June 30, 1945, (State of Oklahoma, Department of Education).

TABLE III

Total Units of Agriculture Offered in All Oklahoma High Schools (North Central Schools Excepted) Compared with Units Offered in Home Economics and Mathematics*

Total Units of Agriculture Voc. and Gen.	Units of Home Economics	Units of Algebra	Units of Geometry	Units of High School Arithmetic
436	1178	846	563	75

We see that home economics is receiving close to three times as much attention as agriculture; yet both can receive federal aid. The curriculum makers see that home economics is included in the curriculums of many schools that are not receiving any federal aid for that program. There are 493 high schools in Oklahoma that offer home economics and only 180 offer vocational home economics. If this condition exists in regard to home economics, then why does not the same relationship exist with regard to agriculture?

We also notice that the schools are offering twice as much algebra as agriculture and one andone-third times as much geometry; yet the curriculum makers cannot find time to offer agriculture. High school arithmetic is the only mathematical subject that is receiving less attention than agriculture. One may wonder if high school arithmetic is receiving the attention that it should.

2. Existing Conditions of Agricultural Education in the Fifty High Schools of the Survey During the 1945-46 Term.

Table IV reveals some of the results found in the survey of the fifty Oklahoma high schools. These schools are located in ten counties from

*Data from the Annual High School Bulletin, June 30, 1945.

various sections of the state. This table tells us the extent to which agriculture is being offered and the extent that the boys are taking advantage of this opportunity.

TABLE IV

Extent to which Agriculture is being Offered in the Fifty Schools of the Survey and the Extent to which the High School Boys are Taking Advantage of this Opportunity

1.	Total number of boys enrolled during the 1945-46 term	2148
2.	Total number of boys taking Vocational Agriculture	353
3.	Total number of boys taking General Agriculture	105
4.	Total number of boys taking any agriculture	658
5.	Per cent of boys enrolled in the schools offering Vocational Agriculture that are taking it	56%
6.	Per cent of boys enrolled in schools offering General Agriculture who are taking it	42%
7.	Schools offering Vocational Agriculture	11
8.	Schools offering General Agriculture	11
9.	Total number of schools that did not offer any agriculture	28

We see that only 22 of the 50 schools offered any agriculture. We see that a larger percentage of the boys who had access to vocational agriculture took advantage of it than did the boys who had access to general agriculture. We see that only 658 out of 2148 boys enrolled in these fifty schools were taking agriculture. There were only 22 schools out of the 50 that offered any agriculture.

The purpose of Table V is to reveal the extent to which agriculture is being taught. The author took the total enrollment of the schools surveyed and the answers from the questionnaire and figured the percentages as shown in Table V.

TABLE V

Extent to which General Agriculture is being Taught in the Fifty Schools of the Survey as a Separate Course and in Related Courses

1. Per cent of schools giving an extra period for laboratory	30%
2. Per cent using textbooks alone	10%
3. Per cent using textbooks plus supplementary material	60%
4. Per cent making own textbook	30%
5. Number of minutes per week devoted to definite agricultural problems in science or other courses	6
6. Per cent of total enrollment of boys who are taking the related courses	17%
7. Per cent of schools offering 4-H Clubs	76%
8. Per cent of total enrollment of boys in schools that offer 4-H Clubs who take it	44%
9. Average number of college hours preparation of teachers who coach 4-H Clubs	9
10. Number of 4-H Club coaches who did not have any college hours in agriculture	19

We see from the above data that only thirty per cent of the schools offer an extra period for laboratory; that only six minutes per week were devoted to definite agricultural problems in the related courses. The boys' only opportunity for agricultural training in twenty-eight of these schools would be the small amount of training that they would receive in the related courses or in 4-H Club work.

We note that 4-H Clubs have reached seventy-six per cent of these schools. We conclude that the 4-H Clubs are offering an opportunity for more agricultural training. After seeing that the average number of college hours that the 4-H coach had and that nineteen out of the thirty-eight 4-H coaches had no college training, we know that the 4-H Clubs cannot

solve the problem by themselves. The 4-H Clubs need help from some source.

The data in Tables I, II, III, IV, and V definitely reveal a lack of interest in agricultural education.

3. Why More Agricultural Training is Not being Offered in the Small Oklahoma High Schools.

a. Reason given by school superintendents.

The writer was interested in finding what the superintendents gave as their chief reason or reasons for not offering vocational agriculture. Their reasons are recorded in Tables VI.

TABLE VI

Chief Reasons for Not Offering Vocational Agriculture as Revealed in the Survey of the Fifty Oklahoma High Schools

1. We have less than 24 boys in our high school; therefore we would be eliminated because of the policies of the state's vocational board.	19
2. State and federal reimbursement in finance too small.	11
3. Because the State Department's policy is to employ teachers on a full time basis, which is to say for teaching vocational agriculture only.	6
4. Failure to secure teachers who have a vocational certificate.	2
5. Other reasons.	2

We notice that nineteen superintendents gave as their chief reason, School too small to compete with larger schools for this program. Also eleven gave a lack of finance, and six gave the policy used by the State - Vocational Agricultural Teachers Teaching only Vocational Agriculture.

We realize that a much better job can be done when the teacher is a full time teacher. As long as the federal funds are limited, we know that the funds should go where they will do the most good. Of course this will be to the larger schools. This is further evidence that some plan is very necessary for reaching the small high school with more agricultural training.

This writer was interested in finding why a course in general agriculture is not offered in the schools that do not offer vocational. If the school is too small to qualify for vocational, then why is general agriculture not offered as an alternative? Questions were asked for this purpose and the results are found in Table VII.

TABLE VII

Chief Reasons for Not Offering General Agriculture as Revealed in the Survey of the Fifty Schools of Oklahoma

1.	Failure to secure teachers who have teaching fields in general agriculture	17
2.	Lack of finance to equip a laboratory	16
3.	Suitable textbooks are not available to cover the different units needed for a full nine months' term	1
4.	Not enough interest among the students if a course were offered	3
5.	Farming is not a major enterprise in this community; therefore the demand for agriculture is not great enough to justify this course	2
6.	We offer vocational agriculture; therefore general agriculture would not be needed	11

Note: Questionnaires from the eleven schools that offered vocational agriculture were eliminated in getting the averages for the table above.

We notice in Table VII that seventeen out of thirty-nine superintendents gave as their chief reason, failure to secure teachers for general agriculture, while in Table VI only two gave this reason. We know that the teaching requirements for general agriculture are much less than for vocational agriculture. The lack of teachers is therefore more an excuse than it is a reason.

Sixteen superintendents gave as their chief reason, lack of finance to equip a laboratory. We know that the cost of equipping a laboratory for general agriculture is very little. Most of the equipment is supplied by nature and acquired at no cost.

b. Interest in agricultural education.

The purpose of the following table is to reveal the interests that school boys and school superintendents have in agricultural education. The results are compiled in Table VIII.

TABLE VIII

Interest of High School Boys and High School Superintendents in Agricultural Education

	YES	NO
1. Do you think that a course in general agriculture would be as profitable as a course in algebra or Latin?	34	5
2. If you offered a course in general agriculture, would you make it elective for girls?	20	18
3. Would you offer a course in general agriculture if the conditions were not satisfactory that you gave in question two of the questionnaire?	30	9
4. How many boys in your high school would take a course in general agriculture if one were offered?		
a. Superintendents' opinion as to the per cent of total enrollment who would take it.	51%	49%
b. Per cent of boys who s aid that they would take it	55%	45%
5. Do you think that more teachers and prospective teachers should take enough training in agriculture to at least qualify them to teach a course in general agriculture?	37	1
6. If you offered a course in general agriculture, would you make it an elective for girls?	26	12

Note: The schools offering vocational agriculture were eliminated in averaging the results of the above questions.

We note in Table VII that only three out of thirty-nine superintendents gave a lack of student interest as being the chief reason for not offering general agriculture, and not one gave this for a reason for not offering vocational agriculture.

Table IV shows us that 56% of the total enrollment of boys are taking vocational agriculture, i.e., when it is offered and likewise 42% are taking general agriculture in the schools where it is offered. Very

seldom do we find both vocational and general agriculture being offered because that would be a duplication.

The percentage that are taking agriculture when they have the opportunity would be counted by authorities as being very good. The head of the Vocational Agricultural Education Department, Oklahoma Agricultural and Mechanical College, said that about fifty per cent of the total enrollment was a good average since the other fifty per cent are planning to enter other vocations.

We notice in Table VIII that the superintendents estimated 51% of the boys would take a course in general agriculture if one were offered, but the boys, when asked, responded with 55% saying "yes". Therefore we cannot say that the lack of agricultural training in our high schools is due to a lack of student interest. We also notice in Table V that 44% of the boys are taking 4-H Club work when it is offered.

This interest would grow in general agriculture and 4-H Club work if the instructor had more training. We see from Table V that fifty per cent of the 4-H coaches in the thirty-eight schools surveyed had no college hours training in agriculture.

c. Finance in agricultural education.

We notice in Table VII that thirty-three of the thirty-eight superintendents gave as their chief reason, the failure to secure teachers or a lack of finance to equip a laboratory.

It is obvious to those who have taught a course in general agriculture that the cost is no more than a course in mathematics, i.e., if the regular science teacher were qualified to teach agriculture. The cost of equipping the laboratory is very little. For example, the livestock andpoultry used in judging can be obtained in the community with no

cost. The grains used for judging can also be obtained with no cost. The level used for running terrace lines can be obtained from the county agent. The material for the study of plants, trees, and insects is furnished by nature. Any number of bulletins can be secured from the State Extension Department free of charge. These bulletins can and should be used for textbooks. This would eliminate the cost of the textbook. The only thing that the school needs in order to offer a course in general agriculture that it does not have is a qualified teacher.

The superintendents say that the cost of a course in vocational agriculture is too high, yet 524 of our accredited high schools do not offer even a course in general agriculture.

The results of a general agricultural course might not be as profitable as a course in vocational agriculture due to less qualifications of the instructor, but if more emphasis were placed on the necessity of agricultural training it would induce more teachers to prepare for teaching this subject.

Superintendents say that the cost of vocational agriculture is too high; yet Table I shows we have 185 schools that are offering vocational agriculture and only 141 offering general agriculture.

Let us further consider the cost of a vocational agricultural course in our high schools.

Smith Hughes Act.

The National Vocation Education Act was passed and approved February 23, 1917. It provided federal funds to be used for the betterment and advancement of agriculture in secondary schools and provided that schools meeting certain standards and qualifications for the work should have a part of the instructor's salary reimbursed. Section X of this Act states

the provisions in order to receive the benefits of such appropriations for the salaries of teachers, supervisors, or directors. They are as follows:

> That such education shall be of less than college grade and be designated to meet the needs of persons over fourteen years of age who have entered upon the work of the farm or of the farm home; that the State or local community, or both shall provide the necessary plant and equipment determined upon by the State Board, with the approval of the Federal Board for vocational education, as a minimum requirement for such education in schools and classes in the state; that the amount expended for the maintenance of such education in any school or class receiving the benefits of such appropriation shall not be less annually than the amount fixed by the state board.....[1]

The Federal Board created under the Smith Hughes Act was discontinued as such in 1933 and consolidated under the United States Department of Interior, Office of Education. The board is now known as the Federal Advisory Board for vocational education and serves in an advisory capacity only.

The Smith Hughes Act has been amended from time to time, the last amendment being the George-Dean Act.

George-Dean Act.

> Be it Enacted by the Senate and House of Representatives of the United States of America in Congress Assembled, that for the purpose of providing for the further development of vocational education in the several states and territories there is hereby authorized to be appropriated for the fiscal year beginning July 1, 1937, and annually thereafter, the sum of $12,000,000: Provided that the several states and territories shall be required to match by state or local funds or both 50 per centum of the appropriations authorized under theprovisions of this section until June 30, 1942, 60 per centum of the year ending June 30, 1943, 70 per centum for the year ending June 30, 1944, 80 per centum for the year ending June 30, 1945, 90 per centum ending June 30, 1946, and annually thereafter 100 per centum of the appropriations authorized under the provisions of this section. One third of this sum each year shall be alloted to the states and territories in the proportion that their farm population bears to the total farm population of the United

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[1] Glen Charles Cook, Handbook on Teaching Vocational Agriculture, pp. 649-667.

States and territories according to the U. S. Census last preceding the end of the fiscal year in which any such allotment is made and shall be used for the salaries and necessary travel expenses of teachers, supervisors, and directors of agricultural subjects in such states and territories.[2]

We see from the content of the George-Dean Act that the money is alloted to the states and territories in proportion that their farm population bears to the total farm population of the United States and Territories. The State Board of Vocational Education has the responsibility of distributing this money to the various school districts.

The census taken in 1940 showed a decrease of the farm population in Oklahoma and the allotment of George-Dean funds for the biennium was decreased as shown in Table IX.

TABLE IX

Comparison of Allotment of Federal Funds Before and After the 1940 Census[3]

	SMITH HUGHES		GEORGE-DEAN	
Allotments made according to the:	Salaries and Administration	Teacher Training	Salaries and Administration	Teacher Training
1930 census	$87,756.55	$6,531.13	$126,795.87	$6,987.26
1940 census	76,343.25	5,944.84	114,801.13	5,435.76
Total annual loss of federal funds to Okla.	$11,413.30	$ 586.29	$ 11,994.74	$1,551.50

The state appropriated for the biennium ending June 30, 1945, $52,650 annually for matching salaries of teachers of vocational agriculture and administration. It further provided the sum of $25,000 to be used only

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[2] Ibid.

[3] State Department of Education, Twentieth Biennial Report, 1944, p. 142.

for matching salaries of such teachers in new departments.

The total amount of money available, state and federal, was not sufficient to reimburse school districts for one-half the amount spent for vocational agricultural teachers' salaries and the State Board for Vocational Education was forced to prorate the funds. They prorated the funds on the basis of the percentage that the federal and state funds are to the local funds expended for salaries of teachers.

From the above data we can see that it is important to keep the boy on the farm or the rural population from decreasing not only for the general welfare of the country but because of more funds for vocational agriculture.

This policy of distribution again is not giving the small rural high school equal opportunities because it is more difficult for the small high school to raise the necessary local funds for matching state and federal funds.

We see no provision in the Smith Hughes or George-Dean Acts that discriminates the small high school but the funds are limited; therefore the funds must be distributed to the communities where they will do the most good. This of course eliminates the small high school from the benefits of this program. This problem could probably be more effectively solved by school consolidation but that will take several years to solve the problem by that method.

The cost of vocational agriculture seems to be the chief excuse for curriculum makers not offering it. Let us see if their excuse is justified. A study was made by Perry W. Reeves.[4] He found that only one per cent of

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[4] Perry W. Reeves, A Digest of the Development of Industrial Education in the United States. Federal Board for Vocational Education, March 1932.

all funds spent for education was spent for vocational education. It is indeed a small proportion when account is taken of the fact that approximately ninety per cent of our population, gainfully employed, is engaged in non-professional occupations in industry, agriculture, commerce and home making. Less than one-third of the money spent for vocational education is used for vocational agricultural education.

Too many times the cost of vocational agriculture to the community is given as a reason for not offering it. This is considered from the standpoint of the total salary paid the instructor plus any other departmental expense. The federal aid, the students' supervised farm practice returns and the holding power of vocational agriculture are overlooked.

In 1932 a study[5] was made in approximately 55 per cent of the departments in North Dakota to determine some of the costs of vocational agriculture. The costs were based on the amount of salary paid by the local district to the instructor after the federal aid was deducted. The average amount of salary paid by the districts for the agricultural instruction was $653.30. The average financial returns for supervised farm practice was $785.84; therefore the returns were greater than the expense. This would show that the training was profitable from a financial standpoint even if we discarded the other values that this training might have.

d. The Importance of Agricultural Education

> According to the data secured by the Federal Board for Vocational Education for a period 1917-1922, there were only 62.8% of all high school students reenrolling in high school, leaving a mortality of 37.2%. Of the vocational agriculture students 83.7% re-enrolled, reducing the mortality of this group to 16.3%.[6]

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5 Cook, op. cit., p. 11.

6 Ibid., p. 13.

From these data it is easy to conclude what effect vocational agriculture has upon the mortality of high school students. We do not have data to show what a good course in general agriculture would have on the holding power of students, but if it were properly taught we cannot deny the fact that it would make a great contribution to the holding power. The school administrator should be interested in methods that will increase the holding power of the high school. A study was made of the number of students dropping out of school and the results are recorded in Table X.

TABLE X

Holding Power of Oklahoma High Schools

13, 14, 15, 16, 17, and 20th Biennial
Report of the State Superintendent of Public
Instruction State of Oklahoma
Year Ending June 30, 1944

Year	Grade	I	II	III	IV
1922-1923	1	129,799	100.0		69,814
1923-1924	2	71,196	54.9		50,314
1924-1925	3	73,674	56.8		50,562
1925-1926	4	72,297	55.7		48,007
1926-1927	5	65,918	50.8		47,119
1927-1928	6	60,120	46.3		45,570
1928-1929	7	51,830	39.9		44,061
1929-1930	8	48,248	37.2		40,720
1930-1931	9	37,289	28.7	100.0	35,588
1931-1932	10	30,806	23.7	82.6	30,046
1932-1933	11	25,075	19.3	67.2	24,466
1933-1934	12	21,780	16.8	58.4	19,797
	H. S. Graduates	19,076	14.7	51.2	
	College				
1934-1935	Freshman	9,408	7.2	25.2	
1935-1936	Sophomore	6,241	4.8	16.7	
1936-1937	Junior	4,561	3.5	12.2	
1937-1938	Senior	4,174	3.2	11.2	
1938	Bachelor Degrees	3,806	2.9	10.2	

Column I - number of pupils enrolled in each grade in the schools of Oklahoma
" II - per cent of first grade pupils found in each successive year
" III - per cent of high school freshmen found in each successive year
" IV - number ofpupils enrolled in each grade in the schools of Oklahoma for 1943-1944 term

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The above data show that the holding power of our high schools is very poor. Only thirty-seven per cent of those who enroll in the first grade finish the eighth grade, and only 51.2 per cent of those who enroll in the ninth grade finish high school. We see that 2.9 per cent of those who enrolled in the first grade received their Bachelors' Degrees and

only 10.2 of those enrolled in the ninth grade received Bachelors' Degrees.

Some kind of revision of the curriculum is vitally necessary. This question of curriculum revision is a big problem. The last chapter of this thesis will approach this problem only in regard to agricultural educa tion.

William Bernard Wyatt made a study of the basic causes of Oklahoma high school students leaving high school in 1938.[7] He states that "15.3% of the boys and 14.5% of the girls gave not enough practical courses" as one of the principal causes for students dropping out of school. Agriculture was one of the subjects that the pupils indicated that they wanted but did not have the opportunity to study while in school. Along with this comparison, 11.8% of the students expressed their reason for dropping out of school as being dissatisfied with the subjects taken. Several teachers expressed the belief that if more practical courses were offered, the holding power of the high school would be greatly increased. The majority of the students studied expressed the same opinion. A total of 47.4% of the pupils who had dropped from the rolls indicated that the school was at fault.

Value of Agricultural Education for its Power to Hold the Farm Boy on the Farm

We all realize that there is at present a great tendency for boys to leave the farm and seek employment elsewhere. As long as we have this condition, all people must depend more on the smaller number who are still farming. A well planned course in agriculture will help to keep

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7 William Barnard Wyatt, A Study of the Basic Causes of Students Leaving High School. Thesis 1938, Library, Oklahoma Agricultural and Mechanical College, p. 17.

the rural boy on the farm. The Federal Board of Vocational Agriculture made surveys of former students of vocational agriculture in forty-seven states in 1932 and secured the following data:[8]

Now farming	63.8%
In related occupations	5.5%
In non-related occupations	19.9%
In agricultural colleges	4.1%
In non-agricultural colleges	6.7%

The above percentages are based on former students who left school with one or more years of instruction in vocational agriculture. These figures indicate the larger percentage of students with agricultural training engaged in agricultural work.

This same study shows the agricultural status of these former students, as follows:

1.	Managers	3.6%
2.	Renters	13.2%
3.	Owners	5.8%
4.	Laborers	32.8%
5.	Partners	44.6%

The above data indicate that the largest percentage became partners in their agricultural work. This condition is a good indication that they will become owners.

Another study was made by Myers[9] in 1924 revealing the following data:

1. From 60-75 per cent of the students given vocational agricultural instruction are now in agricultural work.
2. The vocational classes of agriculture in the States of New York and Pennsylvania are sending from ten to twenty times as large a proportion of their students directly into farming as do the academic high schools.
3. The mortality rate for students in vocational agriculture is only two-fifths as great as the mortality rate for all high school students.
4. Partnership interest is increasing. Of the students reported on farms in 1915, twenty-nine per cent were classed as farmers. This figure jumped to fifty-one per cent in 1921.

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[8] Federal Board for Vocational Education, Bulletin 82, 1932, "Effectiveness of Vocational Education in Agriculture."

[9] Ibid., pp. 55-59. (Bulletin 82, May 1923)

Economic Value of Vocational Training

Vocational training carries definite economic value. Warren[10] made a study of 573 farmers in Tompkins County, New York, and records the following summary:

TABLE XI

Economic Value of Vocational Training

Education	Number of Farmers	Labor Income
Attended district school	398	$318
Attended high school	165	622
More than high school	10	847

Since schooling is a selective process, it is not always safe to say how much of the increased income is due to vocational or other training; however, figures and data given by Warren carry strong implications that training has definite economic value.

From the above data we can conclude that the small amount of agriculture that is offered in our high schools today is not due to a lack of the importance of agricultural education.

e. The school administrator's part in agricultural education

We notice that the two chief reasons given by the superintendents in the survey for not offering more agricultural training were (1) lack of finance, and (2) lack of qualified teachers. The survey shows that thirty out of thirty-eight superintendents said that they would offer

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[10] Stewart and Getman, Teaching Agricultural Vocations, p. 16.

a course in agriculture if the two above conditions were met satisfactorily.

Table VIII shows that thirty-four out of thirty-eight superintendents said that a course in general agriculture would be as profitable as a course in algebra or Latin. Thirty-seven of the thirty-eight superintendents said that more teachers and prospective teachers should at least take enough training in agriculture to qualify them to teach a course in general agriculture.

This group of superintendents seems to recognize the importance of agricultural education, but they were doing nothing about it. Some of these superintendents indicated that they were waiting for the State Department of Education to take the initiative. The proper officials to take the initiative in the solution of this problem, as I see it, are the school administrators. Who do you suppose that society will hold responsible for the solution of this problem if it is not the school administrator? The teachers are overloaded and overworked; yet the school must undertake the task, else it will not be undertaken at all. Where is a better place to start than the curriculum?

Many schools in Oklahoma still cling to the traditional curriculum. They offer for the freshman, English I, Algebra I, Civics and Oklahoma History, and General Science. For the sophomore they offer English II, Plane Geometry, Modern History, and Industrial Geography. For the junior they offer English III, Problems of American Democracy. For the seniors they offer English IV and some more history. There is very little variation from year to year. The students ask for the opportunity to study vocational agriculture, art, music, mechanics, home economics, radio, photography, typing, etc. The administrators say that for various reasons they cannot offer the subjects mentioned but if the student will study the

prescribed course as outlined he will be given a diploma after four years of study, that is, if he completes his work satisfactorily. The students yield to the pressure from parents and society and enroll.

Wrinkle and Gilchrist[11], in Secondary Education for American Democracy, say that Benjamin Franklin was among the first to object to the narrow traditional curriculum. The first academy was the result of his pen. The purpose of the academy was to train youth for their responsibilities as citizens and give them occupational training, but tradition ruled it out. In Benjamin Franklin's letter to the school board he said, "Don't misunderstand me, I am not arguing that adhering to tradition and convention is altogether bad, the opposite extreme is equally as bad."

The traditional curriculum served a great purpose. It was probably best for its day but that does not mean it is best for today. It is true that the student who has completed a prescribed course of study in foreign languages, mathematics, and science is a better risk for college today, but this only proves one thing - that the student has superior scholastic ability. If he had not had superior aptitude he never would have completed the prescribed course of study. But if the colleges want to find out about scholastic aptitude, they can do so much more easily and quickly by testing than they could by giving the student a course in what we called solids. The high school does not belong to the college.

If I were to select one basic cause for the slowness of secondary education to adjust the curriculum to meet the needs of today, I would not say the colleges, the accrediting agencies, or the parents, but the teachers. The reason I made this statement is the fear of administrators

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11 Wrinkle, William L. and Gilchrist, Robert S., Secondary Education for American Democracy, p. 114.

of being different, i.e., afraid of public opinion. Also indifference on the part of the teachers is a/cause. The teachers will say, "I spent years of time and a lot of money in preparing to teach in my fields, why should I discontinue this course or substitute another just because there is less need for it today?" Wrinkle and Gilchrist[12] express this idea by comparing the curriculum to a circle with seven points, as follows: (1) New curriculum; (2) teachers prepare for new courses of study; (3) colleges and accrediting agencies dignify the new subjects; (4) social and economic conditions have changed; (5) teachers are not prepared for the new subjects; (6) parents and public opinion will state that the present subjects were good enough for them, therefore they are good enough for the present; and (7) the school is no longer meeting the needs.

Orata Pedrot[13] says:

> We take a step forward when we teach principles and generalizations primarily and facts secondarily, but if the principles are merely memorized, there will be no transfer from the classroom to the social situation. The various subjects of the curriculum cannot be expected to result in an automatic transfer to the social situation that confronts the child unless by proper teaching and organization of these subjects they can be made a way of life and be so used by the child. This is called humanizing education.

In 1940 the American Youth Commission, in cooperation with the American Institute of Public Opinion, sent out a questionnaire to a cross-section of the United States representing the adult population. The question was: Do you think our present high school curriculums are planned merely for students who are going to college or for those who are not going to college? The results were: College, 34%; for both, 39%; for those not going to college, 8%; 19% did not answer.[14]

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12 Ibid., p. 117.

13 Orata Pedrot, "Transfer of Training and Educational Pseudo Science", Mathematics Teacher, XXXIII (May, 1935), p. 265.

14 Wrinkle and Gilchrist, op. cit., p. 114.

Therefore we see from the above study that only 8% of the people questioned in the United States believed that our present curriculum was preparing the student for life's problems. There are others who would defend the traditional curriculum on the basis that these subjects will prepare the students for professional or semi-professional jobs. Let us see if these reasons are justifiable by analyzing Tables XII and XIII.

TABLE XII

Occupation of Males 14 Years and Over, Employed (Except on Public Emergency Work) for Oklahoma, March 24-30, 1940 (From United States Census Report)

	All Males	Okla. City and Tulsa	Other Urban	All Rural	Rural Farm Only
Number in Each Group	530,123	90,817	116,856	322,450	226,649
Occupation	Per cent	Per cent	Per cent	Per cent	Per cent
Professional and semi-professional workers	5.5	9.0	9.5	3.1	.9
Farmers and farm managers	28.9	.3	1.0	47.1	65.5
Proprietors, Mgrs., and officials, Exc. farm	10.5	15.9	18.4	6.0	1.4
Clerical, sales, and kindred workers	10.3	24.7	18.0	3.5	1.2
Craftsmen, foremen, and kindred workers	10.7	15.9	16.1	7.2	2.7
Operatives and kindred workers	11.7	17.5	18.6	7.6	3.2
Domestic service workers	.4	1.0	.6	.1	.1
Protective service workers	1.7	1.6	2.2	1.6	.1
Service workers, Exc. domestic and protective	3.6	7.5	6.6	1.4	.4
Farm laborers and foremen	1 0.8	.3	1.0	17.3	21.9
Laborers, except farm and mine	5.1	5. 4	7.0	4.4	2.1
Occupation not reported	.8	.9	1.0	.7	.5
Totals	100.0	100.0	100.0	100.0	100.0

TABLE XIII

Occupation of Females 14 Years and Over, Employed (Except on Public Emergency Work) for Oklahoma, March 24-30, 1940 (From United States Census Report)

	All Males	Okla. City and Tulsa	Other Urban	All Rural	Rural Farm Only
Number in each group	128,616	41,457	47,209	39,950	15,602
Occupation	Per cent	Per cent	Per cent	Per cent	Per cent
Professional and semi-professional workers	17.4	11.6	16.8	24.3	20.5
Farmers and fa rm managers	2.4	.1	.1	7.7	19.3
Proprietors, managers & officials, Exc. farm	6.3	5.6	6.5	6.8	2.3
Clerical, sales, and kindred workers	28.8	36.9	30.3	17.5	10.5
Craftsmen, foremen, and kindred workers	.6	.8	.5	.4	.2
Operatives and kindred workers	5.8	6.8	7.8	3.7	2.3
Domestic service workers	20.5	20.9	20.6	19.5	20.9
Protective service workers	.0	.0	.0	.0	.0
Service workers, Exc. domestic and protective	14.3	16.0	15.5	11.2	6.1
Farm laborers and foremen	1.8	.0	.1	5.5	13.5
Laborers, except farm and mine	.4	.3	.5	.4	.3
Occupations not reported	1.7	1.0	1.3	3.0	4.1
Totals	100.0	100.0	100.0	100.0	100.0

There were 658,739 men and women employed in Oklahoma in 1940. Of these, 222,050, or 33.7%, were farmers or employed on farms, while only 51,646, or 7.8% were listed as professional or semi-professional workers.

In the rural districts over 80% of those employed were in some agricultural work. The small, rural secondary schools, however, require all pupils to take subjects designed to train for the professions - especially teaching and engineering.

In the rural districts less than 5% of the people go to college and yet the college entrance subjects dominate the secondary school curriculum

to the exclusion of general education, home economics, agriculture, health education, and cultural training in music and art.

> We easily fall into a worship of certain subjects and certain methods of teaching as if they were in themselves the end of education. If education is to be of real service to farm life and to rural children, we must cease to be awed by traditional subjects and procedures, and build our schools on the essential needs of the countryside and the country child..... Hundreds of millions of dollars of taxpayers' money are going into schools that are not educational institutions at all but simply a species of jail for keeping children in order for a few hours each day..... Not only must the school give its pupils knowledge and skill, it must in some way get this learning into practice by the children and by the community.[15]

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[15] U.S.D.A. Yearbook, 1940, pp. 1033-1040.

CHAPTER III

HOW CAN THE LOCAL AND STATE POLICIES BE ADJUSTED SO THAT THE HIGH SCHOOL CURRICULUM WILL MORE NEARLY MEET THE PRESENT NEEDS OF AGRICULTURAL EDUCATION?

1. National Education Association's Plan[1]

This plan calls for a reorganization of the curriculum. It calls for more practical and vocational subjects. This plan would organize its curriculum around major areas rather than around subjects. The areas would be (1) developing as a citizen, (2) building health and physical strength, (3) exploring personal interests and abilities, (4) preparing for an occupation, (5) developing personal interests and aptitudes, (6) developing civic competence.

Subjects provide some of the materials for learning but the major areas are kept before the pupils and teachers at all times. Great emphasis would be placed on elective courses, all of them functional in nature. The student would be educated as a consumer, a voter, and would learn the beginnings of a trade or occupation. The aim is to produce a person well adjusted to modern society. Future farmers would study those sections of biology, chemistry, and botany which would help them in their work. This plan would virtually abolish algebra and geometry because it claims that these subjects serve no useful purpose for the eighty per cent of the students who do not go to college. Instead, they would learn elements of accounting and the use of a calculating machine.

A college preparatory student would take less foreign languages, less mathematics and science. He would take more social studies, more

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[1] National Association of Secondary School Principles, "Planning for American Youth", and Life Magazine, "Harvard Plan vs NEA Plan", April 22, 1946, p. 89.

physical education and vocational courses. A non-college preparatory student would spend more time in the social, vocational and physical education subjects and the same time in English and the sciences.

I think the plan suggested is practical and many parts of it could and should be used by our administrators as a means of helping to solve the problem that I have been discussing. This program recognizes (1) individual differences, (2) the student has a choice in what he studies, (3) the student learns by actual experiences, (4) it gives the student who does not go to college a better opportunity to prepare for his future occupation. Any program that will achieve these four objectives will be better than our present traditional college preparatory pattern.

The one thing that the administrator must definitely guard against in the reorganization of the curriculum is to <u>be sure not to go to the extreme</u> in vocational education. General education is equally as important. Benjamin Franklin, who was the originator of the practical school of philosophy in America, gave us this warning when he said, "I am not arguing that the traditional curriculum is altogether bad, the opposite extreme is equally as bad."

Many progressive school programs today present too many challenging possibilities to the pupils. The student's attention is directed on the solution of oneproject and before he has finished it, his interests are allowed to focus on another project. We can easily see what has happened to the countries that have gone to the extreme in fostering vocational education.

2. Dean D. C. McIntosh's Plan for Solution

Dean D. C. McIntosh (Dean of the Graduate School of Oklahoma Agricultural and Mechanical College), has suggested a plan for curriculum

construction for the small high school of Oklahoma which is practical. By using it we can more nearly meet the present needs of agricultural education. His plan would give the pupils who do not go to college a better opportunity to prepare for their vocations. This plan is in line with the National Education Association's plan, and is given below:

CURRICULUM FOR A SMALL HIGH SCHOOL

	Grade 9	Grade 10	Grade 11	Grade 12
Time 9:00 to 10:30	I. Farm & home safety. First Aid. Insects & pests. II. Rural organizations. Care of public property. Crime. Price control, etc. III. Typewriting. Speeches & speak.	I. Sanitation. Water & milk supply. Medical inspection. II. Govt agencies. Tariff & foreign trade. Taxes, etc. III. Providing a home library. Newspaper reading. Charts, graphs.	I. Food values. Food & drug laws. Safety measures, etc. II. Relief agencies. Capital & labor. Conservation of resources. III. Propaganda. Sources of information. Oral expression.	I. Home nursing. Nutrition. Care of children. II. Democracy & other govts. Race relations. V. Our schools and educational opportunities. VII. Religious organizations.
10:30 to 12:00	IV. Landscaping the home. Making home conveniences; repairs and care. V. Occupations & their requirements. Budgets & accts. Transportation. Communication.	IV. Providing dairy & poultry products. Budgets & accts. Food requirements. Inc. V. Buying. Selling. Credit.	IV. Family & community relations. Newspapers & magazines for the home. V. Contracts. Planning public recreation.	(Electives) Algebra Agriculture Art Home Economics Industrial Arts Music Geometry Natural Sciences Spanish Plays Literature Social Studies
1:00 to 2:30	VI. Recreation & morale. Travel. Reading. Hobbies. VII. Local churches. Charity. Red Cross, etc.	VI. Picnics. Games. Parties. (Electives) Algebra Agriculture Art Home Economics Industrial Arts Music Nat. Sciences Spanish Plays	VII. Local govt. (Electives) Algebra Geometry Agriculture Home Economics Industrial Arts Natural Sciences Social Studies Spanish Literature Plays	
2:30 to 4:00	(Electives) Agriculture Home Economics Industrial Arts Music Spanish Poetry			

CURRICULUM FOR SMALL RURAL HIGH SCHOOL

This is a consolidated school with from 70 to 90 enrolled in the high school. Less than ten per cent of the graduates in the past ten years have attended any college or university. There are four high school teachers.

General Education or Core Curriculum:

The topics above the dividing lines are suggested for all to study and practice. They may be changed, omitted, or others added to meet the needs of the students, community, state, and nation. The topics to be included are to be selected by the students, the teachers, and other interested citizens under the direction of the school. The Roman numerals in the curriculum outline refer to the Seven Cardinal Principles: I - Health and Safety, II - Citizenship and World Goodwill, III - Mastery of Tools and Spirit of Learning, IV - Worthy Home Membership, V - Vocational and Economic Effectiveness, VI - Wise Use of Leisure, and VII - Ethical Character.

An outline to guide the study of the topics selected is given on pages 13 and 14 of "Using a Resource Unit", National Education Association, 1201 Sixteenth Street N.W., Washington, D. C. Price ten cents.

Community participation and practice relative to the topics studied should continue during the four years. All students should be participating each year in community and school activities.

Provision should be made for keeping this curriculum revised and for securing the best information.

Electives - Specialized or Vocational:

According to the outline, half of the student's time is elective. Students with the assistance of teachers and parents are to select the subjects they are to study and to decide the year the subjects are to come in their program. No specific subjects are to be required. However, each

student is to select sufficient work to keep him busy during the time he is in school. Most of this study will be individual and students may progress at different rates in the same subject. Students may spend part of their time working on topics, issues, or subjects not in the school program if the study and activities can be carried on somewhat independently.

These subjects are suggested for this community: algebra, agriculture, art, geometry, home economics, industrial arts, literature, music, natural sciences, poetry, plays, social studies, Spanish, and possibly others.

One teacher may supervise the study of several subjects in one room at the same time. The entire program is to be elastic.

The purposes of the school, the subjects offered, and the program of the school are to be determined by the local community without state or other interference.

3. Suggested Plans by Oklahoma Agricultural and Mechanical College Faculty Members

a. Consolidation of small high schools and the offering of vocational agriculture to a larger group.

b. Teacher training institutions, stressing the importance to school administrators of agricultural education.

c. School administrators making a study of the area served by their school to determine the objectives of the school.

d. A study by school administrators of the occupations followed by their students after leaving or finishing school.

e. Make the teaching of general agriculture respectable in high schools by offering a full year with emphasis on laboratory and field trips.

f. School administrators encouraging more teachers to take

college courses in agriculture.

g. School administrators recognizing that agriculture is as important as many of the other courses which are offered.

h. The State Department of Education emphasizing agricultural education.

SUMMARY AND CONCLUSIONS

Existing Conditions in Agricultural Education

Only one hundred and eighty-five schools in Oklahoma offer vocational agriculture, and one hundred and forty-one offer general agriculture. This means that sixty-one and six-tenths per cent of our high schools are not offering any accredited agriculture.

There are only one hundred and fifty-three out of the eight hundred and forty-nine accredited high schools offering more than one unit. Agriculture is near the bottom of the list as to the number of units in agriculture offered compared to the other subjects offered in the high school curriculum.

In the schools that offered general agriculture only thirty per cent gave time for an extra period in laboratory exercises. The amount of college preparation for the teachers of general agriculture is only twelve hours; yet we have very few teachers who can meet theminimum requirements.

The only alternative plan to meet the present needs of agricultural education that is receiving very much attention is the 4-H Club work. Seventy-six per cent of the schools surveyed offered 4-H Club work but the average college hours of 4-H Club coaches were only nine. The number of minutes per week devoted to direct agricultural problems in science or other courses was six. This was conclusive evidence that a lack of interest existed in our small Oklahoma high schools.

Why More Agricultural Training is Not Being Offered in the Oklahoma Small High Schools

Failure to secure teachers and the lack of finance were the chief reasons given by the superintendents; yet the data reveals that more

schools were offering the more expensive course (vocational agriculture) than were offering general agriculture. Forty-three per cent of the superintendents said that they didnot have the finance to equip a laboratory for general agriculture. Those who have taught general agriculture know that the cost for laboratory equipment is very small.

The interests of boys and superintendents were adequate. In the schools where agriculture was offered, forty-nine per cent of the boys were enrolled in this subject. Thirty-four out of thirty-nine superintendents said that a course in agriculture would be profitable and thirty out of thirty-nine superintendents said that they would offer a course if they had qualified teachers and finance.

Many claim that the cost of vocational agriculture is too high; yet data in this research shows that only one per cent of all funds spent for education was spent on vocational education and that less than one-third of the money spent for vocational education was spent for vocational agricultural education. Another study revealed that the average annual salary paid by districts for agricultural instruction was only $653.30. If we consider the importance and values received from agricultural education, we cannot claim that the cost is too high.

A further analysis of the data found reveals that the two chief reasons given by superintendents for not offering more agricultural training were not chief reasons, but secondary.

The chief reasons as revealed in this data are: (1) the prevalence of the academic or traditional curriculum in Oklahoma; (2) the lack of superintendents and other officials to adjust the curriculum to meet the present needs of agricultural education. We see from the study of the Annual High School Bulletin for 1945 the academic subjects are dominant, especially in the small high schools.

The data from this study shows that we cannot defend the traditional curriculum because of its value in the transfer of learning or preparation of students for professional or semi-professional jobs. The curriculum changes must come through a process of education. This education in curriculum adjustment must first be received by the school administrator and he has the responsibility of selling the idea to the people.

Adjustments to Meet the Needs of Agricultural Education

The National Education Association's plan would give an opportunity to offer more agricultural training. This program has the advantage of the traditional curriculum in that it gives the student a choice in what he studies, the student learns by actual experience, and it gives the non-college student a better opportunity to prepare for his future occupation.

Dr. Dean D. C. McIntosh's plan offers the same objectives that the National Education Association's plan. This is a practical plan and should be used.

All of the suggestions offered by Oklahoma Agricultural and Mechanical faculty members are good and offer an opportunity for the improvement of agricultural education.

RECOMMENDATIONS

Quoting from the Twentieth Biennial Report of the State Superintendent of Public Instruction, page 146: "During World War II every effort was made by the Teacher Training and Supervisory Staff of Vocational Agriculture to assist men who lack qualifications normally required to meet the pre-war standards. Professional Improvement courses were organized by the teacher training staff for all teachers who lacked the regular qualifications. Additional time was spent by the supervisors with new men for the purpose of aiding them in instructional programs. A number of good instructors who were not fully qualified under the old state plans have been secured."

My first recommendation is that all teacher training institutions in the state of Oklahoma offer courses designed to acquaint the school administrators with the problems in agricultural education, and to follow the plan as stated in the above quotation in regard to instructional aid for teachers

It is recommended, secondly, that teacher training institutions stress curriculum courses for school administrators which would show the value of more practical courses and less academic subjects.

It is recommended that the State Department of Education emphasize agriculture as being one of the important subjects of the high school curriculum.

My fourth recommendation is that the curriculum of the small high school in Oklahoma today should contain the following characteristics: (1) Recognize individual differences; (2) let the pupil choose his subjects rather than to require him to take a prescribed course of study; (3) provide for citizenship, health, and leisure time education; (4)

require at least half of the pupil's time to be spent in activity or a ctual experiences; (5) the personnel for constructing the curriculum should include all of the faculty members; (6) adjustment of the curriculum to the individual and community needs; (7) a definite place for guidance; (8) supervised extra-curricular activities which prevent insufficient and excessive activity; and (9) recognition of the sociological and psychological needs of the pupils.

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