THESIS

A COMPARATIVE STUDY OF

THE LONG TIME PROGRAM AND THE SHORT TIME PROGRAM

IN TEACHING VOCATIONAL AGRICULTURE

Submitted by

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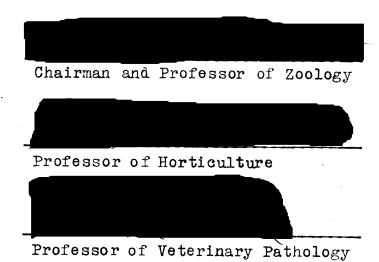
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CONTENTS

Chapte	r	Page
I.	Introduction	ì
II.	Determining What States Use The Long Time Program And The Short Time Program	8
III.	Determining The Influence Of The Long Time Program And The Short Time Program In Encouraging Farm Boys To Stay In School	11
IV.	Determining The Opinions Of The State Directors Of Vocational Agriculture Of The Long Time Program And The Short Time Program For Teaching Vocational Agriculture.	17
V •	Determining The Opinions of Teachers Of Vocational Agriculture Using The Long Time Program And The Short Time Program As To The Relative Merits Of Each Program	25
VI.	Determining Whether The Long Time Program Or The Short Time Program Gives The Best Course For The Boy Preparing For The Business Of Farming	31
VII.	Determining What Types Of Farming Are Best Adapted To The Teaching Of The Long Time Program And The Short Time Program	34
vIII.	Conclusion	44
	Appendix	
	Bibliography	46

A COMPARATIVE STUDY OF THE LONG TIME PROGRAM AND THE SHORT TIME PROGRAM IN TEACHING VOCATIONAL AGRICULTURE

CHAPTER I

Introduction

I. The Problem Stated

The problem attempted in this thesis is determining the relative merits of the long time program and the short time program in teaching vocational agriculture.

The solving of this problem involves the solving of the following minor problems:

- A. Determining what states use the long time program and the short time program.
- B. Determining the influence of the long time program and the short time program in encouraging older farm boys to stay in school.
- C. Determining whether the long time program or the short time program offers the best course for the boy preparing for the business of farming.
- D. Determining what types of farming are best adapted for teaching the long time program and the short time program.
- E. Determining the opinions of the state directors of vocational agriculture of the long time program and the short time program.

F. Determining the opinions of teachers of vocational agriculture, using the long time program and the short time program, as to the relative merits of each

II. Terms Defined

The long time program is the teaching of vocational agriculture over a period of two or more years teaching both phases of agriculture (plant, animal, fruit, and vegetable production) each year, but with increasing difficulty.

Example of the Long Time Program

First Year	Second Year	Third Year	Fourth Year
beets	beets	beets	beets
wheat	wheat	wheat	wheat
sheep	sheep	sheep	she e p
alfalfa	alfalfa	alfalfa	alfalfa

The subjects taught should be based upon a farm survey of the community where the teacher is teaching.

The short time program is the teaching of vocational agriculture over a period of one or more years, teaching one phase of agriculture (plant production) one year and the other phase (animal production) the next year, the two programs alternating each year.

Example of the Short Time Program

First Year	Second Year	Third Year	Fourth Year
dairying	alfalfa	dairying	alfalfa
sheep	beets	sheep	beets
poultry	corn	poultry	corn
pork	cotton	pork	cotton

The subjects to be taught should be based upon a farm survey of the community where the teacher is teaching.

Vocational Agriculture as defined by the Smith-Hughes
Act

"Any training of less than college grade, the purpose of which is to prepare a person to pursue effectively a specific farming occupation, must further meet the following qualifications:

- 1. Fit for useful employment
- 2. It shall be less than college grade
- 3. It shall be designed to meet the needs of persons who have entered upon or who are preparing to enter upon the business of farming
- 4. Provisions shall be made for at least six months of directed or supervised practice in agriculture"

III. Origin of the Problem

With the passage in Congress of the Smith-Hughes Act in 1917, an act that was to help the farmers and farm boys to become better farmers through instructions in agriculture in our all day schools, evening schools, there was born in the educational world a new type of education that was foreign to all the educational administrators of that time.

The setting up and putting into operation of this act was one of the biggest problems of the day. The actual setting up of this program was left to the state board of vocational education that had been created in

each state, this board to have the outlining of their program. Any program outlined by this board and approved by the Federal Board for Vocational Education at Washington, D. C., was immediately put into operation. In this way one state might have an entirely different program from the other states depending entirely upon the state board that put it into operation.

On January 1, 1918, all of the states that accepted the provisions of the Smith-Hughes Act were using what might be called the short time program, which consisted in many cases of a modified form of what was formerly the course in general agriculture.

The interest of state supervisors and teachers of vocational agriculture in the problem stated has had a marked effect upon the growth and development of both the long time programs and the short time programs. It has been their desire and aim to set up a program of study that would develop the farmers into better farmers and make real farmers out of the farm boys.

IV. Reasons for Making This Study

For the past ten years or since the Smith-Hughes Act became effective, the agricultural colleges throughout the United States have sent thousands of men into the field of vocational agriculture teaching, all with the same idea - that of training farm boys to become better farmers, but with no uniformity as to ways, means, or methods to accomplish their purpose.

These teachers of vocational agriculture are confronted with the problem of choosing a program that will put itself over by actually delivering the goods, in this way selling itself to the community. Up to this time there has been no uniformity in the programs used, one teacher may use the short time program and the teacher in the next town or community may use the long time program. It is the purpose of this study to make a comparison of these two major programs and decide which program is best serving the ultimate aim of all programs - that of preparing the boy to be a successful farmer. It is with this idea in mind that this thesis is attempted.

The farming area of the United States is of such magnitude that it necessarily stands to reason that there are many different climates, types of soils and physical conditions over which we have no control. It is quite possible that there are localities and even whole states where one of these dominating programs might be better adapted than in other places. To decide this question, if possible, and to locate the types of farming that are adapted to the long time program and the short time program is another reason for attempting this thesis.

V. Previous Studies in This Field

So far as can be ascertained, there has been no previous study made in this field.

VI. Sources of Data and Methods of Obtaining Data

The main sources of information on the long time program and the short time program are:

- 1. State directors of vocational agriculture
- 2. Teachers of vocational agriculture
- 3. Textbooks and magazines

questionnaires* were sent to the State Directors and teachers of vocational agriculture in all of the states, the teachers being recommended by their supervisor as being outstanding in the teaching of vocational agriculture. Certain specific questions in regard to the program they were using were asked of both state supervisors and the teachers - questions that obtained their opinions of both the long and the short time programs.

Information was also secured through interviews of a personal nature with the following state and federal officials: Mr. Charles R. Allen, Editor and Educational Consultant of the Federal Board for Vocational Education; Mr. F. J. Hubbard, State Director of Vocational Agriculture of Mississippi; Mr. Albert Barnett, formerly State Supervisor of Vocational Agriculture for the state of Arizona; Mr. C. L. Davis, State Director of Vocational Agriculture of Texas; Mr. J. H. Pearson, State Director of Vocational *Questionnaire in full found in Appendix

Agriculture of Nebraska; and Mr. C. B. Gentry, State Director of Vocational Agriculture of Connecticut.

At all times the interviews were of such a nature as to bring out the outstanding points or merits of each program, and to justify the use of the program in their state.

Little data of material value was found in books on vocational subjects, the subject of the long time program and the short time program being a comparatively new subject and no extensive study has been made. Some material of value was found in vocational education magazines - information not bearing directly on this particular subject, but on curriculum making in general.

CHAPTER II

Determining What States Use The Long Time Program And The Short Time Program In Teaching Vocational Agriculture

The problem attempted in this chapter is to determine the states that use the long time program and the short time program. For the purpose of administration, the United States is divided into four regions - the western, central, eastern, and southern, each with a regional supervisor. To ascertain if the regional supervisor is exerting his influence for one particular type of program, and to see if the long time program and the short time program are confined to any particular region, is the main purpose of this chapter.

From questionnaires* that were sent to the state supervisors of vocational agriculture, replies were received from thirty-six states. From these thirty-six states, it was evident from their replies that there were three separate and distinct types of programs in use throughout these states. The programs in use are the long time program, the short time program, and both the long time and the short time program.

Table Number I

1. States Using the Long Time Program in Teaching Vocational Agriculture

Delaware	Massachusetts	Tennessee	Vermont
Florida	Montana	Texas	New Mexico
Georgia	Rhode Island	Utah	

^{*}Questionnaire in full found in the appendix

Table Number 2

2. States Using the Short Time Program in Teaching Vocational Agriculture

Alabama Colorado	Iowa Michigan	Indiana New Jersey	Wisconsin Wyoming
Idaho	Missouri	North Dakota	
Nebraska	Ohio		

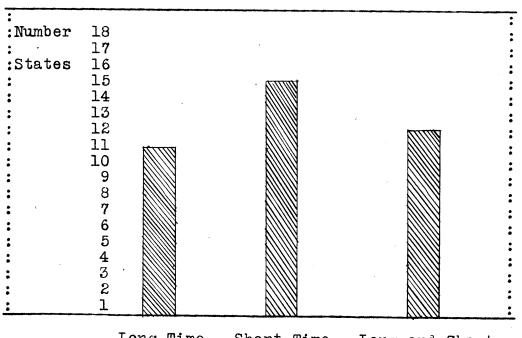
Table Number 3

3. States Using the Long Time Program and The Short Time Program In Teaching Vocational Agriculture

Arizona	Connecticut	Mississippi	Oregon
Arkansas	Maryland	New Hampshire	South Carolina
California	Minnesota	North Dakota	West Virginia

Table Number 4

4. Table Showing the Number of States Using the Long Time Program, the Short Time Program, and Both the Long and Short Time Programs.



Long Time Program

Short Time Program

Long and Short Time Program

It can be seen from the graph that the short time program is still the leading one, with thirteen states using it. The long time program is last with eleven states, while the long and short time program is used in twelve or one-third of the states heard from.

CHAPTER III

Determining The Influence Of The Long Time Program And The Short Time Program In Encouraging Farm Boys To Stay In School

The problem attempted in this chapter is determining whether the long time program or the short time program is best for encouraging farm boys to stay in school.

In the previous chapter we have learned that there are thirteen states out of the thirty-six surveyed using the short time program, eleven states using the long time program, and twelve or one-third using the long time program and the short time program.

The opinions and findings of the teachers and state supervisors of vocational agriculture, as to the merits of each program in encouraging the farm boy to stay in school, will be the main factor in solving this problem.

A questionnaire* including the following question, that pertained to the solving of this problem, was sent to the state supervisors and teachers of vocational agriculture in the states using the long time program and the short time program:

I. What percent. of your students that take vocational agriculture take the course for one year?
Two years? Three years? Four years?

The opinions of the state supervisors in states that total 2,359 schools that were teaching vocational agriculture, 1,524 *Questionnaire in full found in the Appendix

of which were using the short time program and 835 the long time program, as to the actual percentage of farm boys that take vocational agriculture for one, two, three, and four years has been tabulated and will be used as a basis for discussion on the problem involved in this chapter. The data compiled from the answers of the thirty-six state supervisors will be given in Table Number V.

Table Number V

Average Percentage of Students Taking Vocational Agriculture
In States Using The Long Time Program, The Short Time Program,
And the Long Time Program And The Short Time Program

Long Time Program Short Time Program	Long and Short Time Program			
Average Percentage of Students Taking Vocational Agriculture For -				
lyr;2yr;3yr;4yr : lyr;2yr;3yr;4yr ;	lyr:2yr:3yr:4yr			
33 :33 :20 :15 : 61 :29 : 9 : 1	36 :26 :20 :16			

Number V, it seems as the the states that use both the long time program and the short time program in their teaching of vocational agriculture, actually keep the largest percentage of the farm boys in school throughout the four years of high school. This information is important when we consider that this particular type of program is made up of both the long time program and the short time program, both programs being in use in these states, and that these astonishing results

have been found. This justifies the statement that it is doing good work in serving the farmers in preparing their boys to become farmers.

The comparisons that can be made of the long time program and the short time program from the data given in Table V are:

- 1. There is a larger percent. of drop-outs at the end of the first year in states using the short time program than in states using the long time program
- 2. The short time program reaches more farm boys the first year than does the long time program
- There is a very noticeable drop out of farm boys in schools using both programs at the end of the second year, but it is more noticeable in the states using the short time program
- 4. A much larger percent. of the farm boys in states using the long time program take the work for four years than do the farm boys in states using the short time program.

The opinions of the teachers of vocational agriculture that are on the job doing successful teaching, as to the actual percentage of farm boys in their schools that take the course for one year, two years, three years, and four years has been tabulated and will form an additional basis for discussion on the problem involved in this chapter.

The data compiled from the answers of the sixty-five

teachers of vocational agriculture, scattered throughout the thirty-six states, will be given in Table Number VI.

Table Number VI

Average Percentage of Students Taking Vocational Agriculture In Schools Using The Long Time Program And The Short Time Program

Long Time Program 1 yr.:2 yr.:3 yr.:4 yr.	: Short Time Program : 1 yr.:2 yr.:3 yr.:4 yr.
50 25 18 7	58 27 : 10 : 5

No data was available on the schools using the long time and short time program from the questionnaire sent to the teachers as in every case they were using the long or short time program entirely. That program is not considered in solving our problems, but only to show that there is a program that one-third of the states surveyed were using, and therefore could not be ignored.

The comparisons that can be made from Table Number VI as to the relative merits of the long time program and the short time program in the length of time each program keeps the boy in school are as follows:

1. There is a high fatality list at the end of the first year for boys taking vocational agriculture. This is so and almost the same in both programs, there being slight difference in favor of the long time program

- 2. The short time program reaches more farm boys the first year than does the long time program
- 3. The drop out at the end of the second year is far too great in both programs, but is more noticeable in the short time program
- 4. A larger percent. of farm boys stay in school for the full four years in the schools that are using the long time program than in schools teaching the short time program

Referring to the foregoing tables and statements of facts, it is obvious in the states using the short time program for teaching vocational agriculture, that for various reasons unknown, the short time program is not successful in extending to the farm boy in the third and fourth year of high school the facts and knowledges of scientific agriculture that are so essential for his success as a farmer.

as given by both state supervisors and teachers of vocational agriculture is tragic, whether this is due entirely to the program in use or to the fact that the teachers have not advertised their course and encouraged their students to realize the necessity of taking all the agriculture offered in their school in order that they may know more about the profession that they are choosing for their life work. The fact remains that there are not enough farm boys staying in school and taking four years

of vocational agriculture, but they are drifting back to the farm with only a small amount of farming knowledge.

The long time program like the short time program seems to be a comparatively inoperative program after the first two years of operation, so far as teaching the farm boy four full years of agriculture. The drop outs are very noticeable after the first year and increases each year until the end of the fourth year indicates that far too few of our farmers to be are studying their chosen profession. Again, whether this is due to the program or the teacher, we are unable to say, but the fact remains that out of the total number enrolling under the long time program only about ten out of every hundred get the entire four years of agriculture.

That the long time program is keeping more boys in high school can be readily ascertained by referring to the Tables number V and VI. In the third year vocational agriculture was taught in Table V there were 20% taking the course in the long time program compared to 9% in states using the short time program. The same point is also proved in Table VI where the contrast is 18% to 10% in favor of the long time program. The contrast as to number of boys taking the course for four years is very pronounced in Table V where under the long time program 15% take the course for four years, compared to 1% under the short time program.

CHAPTER IV

Determining The Opinion Of The State Directors
Of Vocational Agriculture Of The Long Time Program And The Short Time Program For Teaching
Vocational Agriculture

The problem attempted in this chapter is to determine the opinions of the state directors of vocational agriculture as to the merits and demerits of the long time program and the short time program for teaching vocational agriculture.

From data already presented in previous chapters it is apparent that the long time program and the short time program for the teaching of vocational agriculture is not confined to any particular section in the United States. The state supervisor of the state of Idaho believes that the short time program is the best for teaching vocational agriculture in his state, while in the same section, the state supervisor of Montana believes that the long time program is getting equal or better results. To determine which of these two major programs in the opinion of the state directors of vocational agriculture is the best will be one of the chief aims of this chapter.

A questionnaire* was sent to the state supervisors and teachers in states using the long time program and the short time program in which the following question that pertained to *Questionnaire in full found in the appendix

the solving of this problem was asked:

1. In your opinion which of these programs is better suited to the usual conditions found in your state? Why?

The answers and opinions of the state supervisors of vocational agriculture in the states using the long time program and the short time program have been tabulated, and will be used as a basis for discussion on the problem involved in this chapter.

Table Number VII

Opinions Of The State Supervisors of Vocational Agriculture
Of The Long Time Program And The Short Time Program

States in which the state supervisors of vocational agriculture believe the long time program best suited	States in which the state supervisors of vocational agriculture believe: the short time program test suited
Alabama* Arkansas* California* Connecticut* Delaware Florida Idaho* Maryland* Massachusetts Minnesota* Mississippi Montana New Hampshire* New Mexico* Rhode Island South Carolina Texas Utah Vermont	Arizona Colorado Indiana Iowa Michigan Missouri Nebraska Nevada Nev Jersey North Dakota Ohio West Virginia Wisconsin Wyoming

^{*}States using the short time program, but believe the long time program best for teaching vocational agriculture

that the long time program for teaching vocational agriculture is considered the best plan by a majority of the supervisors who answered this question. It will be noted that only thirty-three of the thirty-six who answered questionnaires answered this particular question; of this number, nineteen believed the long time program was best for teaching vocational agriculture, while fourteen thought the short time program was best.

That many state supervisors using the short time program for teaching vocational agriculture do not believe it the best method, is shown in Table VII. Nine states that are teaching the short time program indicated that they believed the long time program would be more efficient and obtain better results. On the other hand, none of the states that use the long time program believed the short time program better adapted to their states.

In answer to the second part of the question as to why they believed one program was better suited to their usual conditions found in that state, various replies were received in support of both the long time program and the short time program for teaching vocational agriculture.

Quotations from state supervisors who believe the long time program of teaching vocational agriculture best In their state:

"Long time program leads somewhere" - Montana

"We can take care of the short time program by short time and evening schools" - Rhode Island

"It suits activities of students better" - South Carolina

"A farmer in actual farming carries all enterprises along together. Jobs can best be taught as they need to be done in running an actual farm business" - Florida

"Makes possible more nearly real farm situations. Farmer does not grow crops one year and animals the next" - West Virginia

"A short time program does not make for a permanent system of agriculture" - Utah

"Where teachers are properly trained, the long time program is best" - Connecticut

"Better results are obtained in schools using the long time program of instruction" - Mississippi

"Fits into the regular high schools schedule of classes best. Gives a more thorough course in farming" - Maryland

"Nearer actual farming conditions" - Arkansas

"Because we must teach as the farmer farms" - Minnesota

"Short time program does not put together in learning those things that go together in practice. It is one of the fundamental principles of psychology procedure given us by Thorndike in his "Educational Psychology" that these things should be taught together that go together in practice" - Texas

- "(A) Short time program may defer too long the study of enterprises in which the pupil is interested
 - (B) Short time program assumes the lack of continuance of interest
 - (C) Destroys unity of courses
 - (D) Long time program allows for growth and maturity in the eventual completion of subjects begun early

- (E) The long time program avoids the boresome situation of putting a full year on the least interesting subject with no alleviating courses in the same year
- (F) The long time program tends to keep pupils in school longer" (Quotations A to F) Massachusetts
- "Cycle of production and marketing cannot be completed in one year
- "The long time program makes possible a better correlation of directed practices and classroom work" New Mexico
- "The long time program holds interest of boys. Continues in some type of project" Idaho
- "The long time program teaches as the farmer farms. Creates more interest in his work in vocational agriculture work" Alabama

Quotations From State Supervisors Who Believe The Short Time Program of Teaching Vocational Agriculture Best In Their State:

- "Students should study all phases of any enterprise in order to be able to conduct productive projects" Ohio
- "The short time program presents a much better possibility for organization with very much less likelihood of going over each year the material which was presented in the previous year" Wisconsin
- "Provides for two units in each of two years" Missouri
- "Our schools are small, we alternate the courses and encourage students to carry continuation projects" Nevada
- "We are working in an individual agricultural state and we can better emphasize enterprises with the short time program" Wyoming
- "The short time program fits into our school program best" Michigan
- "Our schools are not large, we usually combine the eleventh and tenth grades in one class, thus having the experienced pupils and the beginners in the same class" Iowa
- "Able to cover subject matter more thoroughly, to carry on

projects suited to subjects, meets demands for specific units, retains subject student may be interested in " - Arizona

"The short time program is strong in that it secures concentration. It discourages padding courses. It does not require a pupil to waste time in securing a complete unit" - Massachusetts

"The short time program completes an enterprise in a year, therefore it gives the boy a concept of the enterprise as a unit, which is fundamental in developing managerial ability"

- (2) Unless he is able to see the enterprise as a unit, he will be unable to formulate a home project program
- (3) Under the long time program where only certain specific type jobs are taken up each year, in many enterprises it does not give unity of thought
- (4) A program where related enterprises are taught together would be a modification of both programs and would seemingly have the merits of both the long time program and the short time program" Nebraska

"I believe the short time program might be better in areas of highly specialized farming if pupils are inclined to leave school early" - (Teacher Trainer) - Massachusetts

From these quotations that are from supporters of the long time program and the short time program, one draws the conclusions that there is lots of good in both programs. State supervisors, as a rule, are big men and are willing to lay aside all personal prejudice and say what they think. This is proven in the quotations above and in their answers to the question involved. Nine supervisors that were using the short time program said they believed the long time program was best for their state. There were no supervisors using the long time program that thought the short time program best.

That there is a tendency toward the adoption of a long time program or a program that is of that nature is to be looked forward to in the near future if the opinions of the state supervisors of vocational agriculture mean anything.

CHAPTER V

Determining The Opinions Of The Teachers Of Vocational Agriculture Using The Long Time Program And The Short Time Program As To The Relative Merits Of Each Program

The aim of the preceding chapter was to establish the ideas and opinions of the administrative force in states that were using the long time program and the short time program in teaching vocational agriculture. The present chapter turns to another group, the teachers of vocational agriculture in states using the long time program and the short time program, who are on the job. The ideas and opinions of this group of teachers, who are teaching both programs, will be of invaluable aid in solving the major problem of this thesis, and will be the main factors in solving the problem of this chapter.

The problem that confronts us in this chapter is to determine the opinions of the teachers who are teaching the long time program and the short time program, as to the relative merits of each program.

A questionnaire* in which the following question that pertained to the solving of the problem stated was sent to three teachers of vocational agriculture, in the same states in which the questionnaire was sent to the directors of vocational agriculture, the same question being asked the teachers that was asked the directors.

^{*}Questionnaire in full found in Appendix.

I. In your opinion which of these programs is the better suited to the usual conditions found in your state? Why?

The answers and opinions of these teachers of vocational agriculture have been tabulated and will be used for the basis of discussion in this chapter, and as a basis for comparison and discussion with the opinions of their state supervisors in their state in the conclusion of this thesis.

TABLE VIII

Opinions Of The Teachers Of Vocational Agriculture Of The Long Time Program And The Short Time Program.

	er of teachers the best.	: States and number of teachers : in each state who believe the : short time program best.	
States	No. Teachers	<u>States</u>	No. Teachers
Utah	1	Wisconsin	1,
Arizona	2	Mississippi	2
Minnesota	3	: Ohio	2
Florida	1 2	: Delaware	1
Delaware	2	: California	2
Arkansas	3	: Indiana	1 2 2 1 2 1
Michigan	3	Rhode Island	1
Tennessee	1	Alabama	1
Nevada	1 2 2 2 1 2 1 2	North Dakota	1 1
Alabama	2	: Montana	
Iowa	. 2	: Wyoming	1 1
Maryland	1 :	: West Virginia	1
Indiana	2	1	
Rhode Island	1 :	•	
Wisconsin	2	•	
South Carolina	2	•	
Missouri	1 :	:	
Mon tana	1		
Massachusetts	2		
North Dakota	/ 1		
Texas	1 :	:	
West Virginia	1 1		
Wyoming	2 :		
Total	 3 9	Total	15

That the teachers of vocational agriculture in the states using the long and short time programs believe the long time program is the best program, is conclusively proven in Table Number VIII. Out of replies received from fifty-four teachers using the long time program and the short time program, thirty-nine of these teachers believed the long time program was best adapted to their state, while only fifteen out of the fifty-four replying thought the short time program was best adapted to their state. In some cases teachers from the same state failed to agree as to the best program for their state as Table Number VIII will show. It is to be remembered, however, that these are the opinions of the teachers and naturally three teachers from the same state might not agree.

In answer to the second part of the question sent them in questionnaire as to why they believed one program was the better for their state, various statements were made to substantiate their opinions. A few of these statements in support of the long time program and the short time program by teachers teaching both programs are given in order that we can see the logic of their opinions.

I. Quotations from teachers of vocational agriculture who believe the long time program of teaching vocational is the better suited to their state.

- "I think that special types of farming can be more effectively handled by the long time method."
 Wisconsin.
- "The long time program at its best is too short, to make a successful farmer out of our farmer boys." Massachusetts.
- "In a community where plant and animal enterprises is carried on, I believe the long time program would be more effective in training the farm boy to become a better farmer." Montana.
- "Whether the long time program or the short time program is taught successfully depends upon the teacher. The farm boy will get much benefit from either program." Iowa.
- "I am of the opinion that the long time program would be best for teaching all farming enterprises."
 Wisconsin.
- "For a diversified system of agriculture the long time program is best." Minnesota.
- "Where one major crop is grown the long time program is best." Rhode Island.
- "I am very much in favor of the long time program.

 This gives the student a chance to get the related sciences such as physics and chemistry, that are so much needed in vocational agriculture courses."

 Michigan.

2. Quotations from teachers of vocational agriculture who believe the short time program of teaching vocational agriculture is the better suited to their state.

"I do not feel that the short periods required for the teaching of both subjects under the long time program gives sufficient time for stock judging, field trips, and laboratory work, that should be carried on in connection with these subjects."

"Teach the boy in the most up to date manner the more important fundamental jobs, get him started into the farming business, this can be more successfully done using the short time program."

Mississippi.

"In this particular section of the state the conditions of the soil and the contour of the land seems to be favorable for poultry farming, where any section is particularly adapted to a one type farming, I think the short time program best." Rhode Island.

"It is very necessary in our section of California to teach the farm enterprises in a highly specialized way, we have several crops that are of such importance that we spend an entire year on this crop alone, where this is the case the short time program of teaching vocational agriculture is best." California.

"I have enough difficulty covering one phase of agriculture in one year without trying to cover both animal and plant production each year."

Delaware.

"I feel that the long time program for teaching vocational agriculture might be best where a community spends over eighty percent of its efforts upon a special enterprise, while the short time program is best where the type of farming is more diversified." Ohio.

The opinions of the teachers using the long time program and the short time program, extracts which are quoted above, are in most cases too indefinite and vague. They seemingly do not support their argument or their opinion that one program is better than the other. Most of the teachers quoted, both for the long time program and the short time program, seem very broad in their belief, seeming to think that both programs have quite a bit of good in them and only under certain circumstances that one program is better than the other. Very few of the teachers justified their opinions. This is to be regreted, as it seems they are teaching a program of instruction, but can't justify its merits.

That the long time program for teaching vocational agriculture is considered the better way for teaching agriculture is most clearly shown in Table Number VIII.

Teachers that are teaching the short time program have, after giving it a fair trial, said that they believe the long time program a better method of teaching in their state. In some cases the teacher had taught both programs and had come to their decision by the trial and error method.

CHAPTER VI

Determining Whether The Long Time Program Or The Short Time Program Gives The Best Course For The Boy Preparing For The Business Of Farming

The aim of the Smith-Hughes Act is set forth in no uncertain terms: The act as it applies to the agricultural situation is to prepare boys who expect to become farmers to become real farmers through instruction in vocational agriculture schools. The problem that is attempted in this chapter is to determine which of the two programs, the long time program or the short time program, gives the best course for the boy preparing for the business of farming.

The Smith-Hughes Act has been in operation long enough for us to see real results on every farm. Where the young farmer has taken advantage of the opportunity presented in the local high school to study agriculture, we have seen his land increase in productivity threefold and his dairy herds become more productive as a result of the scientific and practical knowledge imparted to him on the part of the vocational agri-Whether the success of the agriculture cultural teacher. program thus far has been due to a special type of program The opinions of the teachers of we are unable to say. vocational agriculture using the long time program and the short time program as to the part each program plays in making the business of farming a success will give us a good idea of the relative merits of each program.

A questionnaire* in which the following question that pertained to the solving of the problem involved in this chapter was sent to three teachers of vocational agriculture in thirty-six states.

In your opinion which course offers the best course for the boy preparing for the business of farming?

These opinions have been tabulated and will be used for the discussion in this chapter and for the solving of the major problem involved.

Table IX

States and number of teachers: States and number of teachers of vocational agriculture who : of vocational agriculture who believe the long time program : believe the short time program offers the best course for the: offers the best course for the farm boy.

: farm boy.

States	No. Teachers	: States	No. Teachers
Arizona Utah Minnesota Florida Delaware Arkansas Michigan Tennessee Nevada Alabama New Mexico Iowa Maryland Indiana Rhode Island Wisconsin South Carolina Missouri Montana		: Wisconsin : Mississippi : Ohio : California : Indiana : Rhode Island : Alabama : North Dakota : Montana : Wyoming : West Virginia	1 2 2 1 1 1 1 2 1

^{*}Questionnaire in full found in Appendix.

States	No. Teachers	:	States N	0.	Teachers
Massachusetts	2	:			
Texas	1	:			
North Dakota	1	:			
West Virginia	1	:			
Wyoming	1	:			
Total	38		Total		15

That the teachers of vocational agriculture in the states using the long time program and the short time program believe the long time program is the best program for the boy preparing for the business of farming is proven if their opinions as registered in table number IX mean anything. The fact that their approval of the long time program in such a forceful way would indicate that this program is serving the farmer boy in a very efficient way in his preparation to become a farmer.

CHAPTER VII

Determining What Types of Farming Are Best Adapted To The Teaching Of The Long Time Program And The Short Time Program

The farming area of the United States is of such vast magnitude that it stands to reason that there are many various types of farming. Crops that are the main sources of livelihood in Alabama might not be at all successful in California. The climate, altitude, rainfall and soil are all physical conditions over which we have no control and are responsible for the different types of farming throughout the United States.

The problem that confronts us in this chapter is determining what types of farming are adapted to the long time program and the short time program. With such an extensive farming area it is possible and quite probable that there are certain types of farming in certain localities that are particularly adapted to the teaching of the long time program or the short time program. To determine this very important problem will be the chief aim of this chapter.

A questionnaire* in which the following question was asked and table for filling in the program that was best suited to a particular type of farming, was sent to the state supervisors and teachers of vocational agriculture in the thirty-six states surveyed.

*Questionnaire in full found in the Appendix

- I. Do you believe that one of these programs would be suitable for certain types of farming, but not so good for other types?
- II. If you answer yes to Number I, please check (x) below the program you believe to be better suited to each of the regional types of farming

Type of Farming	: :Short	Time	Program	Long	Time	Program
Cotton with a minimum of other crop or animal enterprises	: :			•		
Wheat with a minimum of other crops or animal enterprises	:					
Corn belt farming	:					
Dairy Farming	:					
Truck farming	:					poli Vinado de la Maria de
Fruit growing	:					
Beef farming	:					
Sugar beet farming	:					
Tobacco farming						
Potato farming						
Sugar cane farming						
Hay farming						
Sheep farming	:		:			

Type of Farming	: :Short	Time	Program	Long	Time	Program
Poultry Farming				:		
Pork farming	:					
Other Types	:					

The answers and opinions of the state supervisors and teachers of vocational agriculture in states using the long time program and the short time program to question I and to Table X, have been tabulated and will form the basis for solving the problem involved in this chapter.

Table XI
Opinions of Teachers Concerning Certain Kinds of Programs Suited to Different Types of Farming

States	No. say Yes	: : States	No. say No
Utah Wyoming Ohio Alabama California Mississippi West Virginia Wisconsin Arkansas Texas Massachusetts	1 2 2 2 1 1 2 2 1	: California : West Virginia : Montana : Mississippi : North Dakota : Indiana : Wisconsin : South Carolina : Nevada : Michigan : Iowa	No. say No 1 1 1 2 1 1 1 2 1
Montana Iowa Missouri Arizona Minnesota Rhode Island Indiana Delaware Maryland New Mexico Nevada	1 1 2 1 2 11 1	Arkansas Florida Arizona	1 1
Tennessee Michigan Total	1 1 31	: Total	16

There are certain types of farming that are adapted to the teaching of the long time program and other types that are adapted to the short time program. if we consider the opinions of the teachersof vocational agriculture who are teaching these two programs as authentic. While in many cases the teachers from the same state fail to agree in their opinions of the suitability of one program for certain types of farming and the other program for other types, the ratio is almost two to one or thirty-one to sixteen in favor of teachers who believe that the long time program of teaching vocational agriculture might work better in certain types of farming than does the short time program, and that the short time program of teaching vocational agriculture might work better in certain types of farming than does the long time program. These opinions are based on the actual teaching experiences of the teacher and are in every way worthy of careful consideration in solving the problem involved in this chapter.

The opinions of the state supervisors of vocational agriculture to question number one, in the states surveyed, have been tabulated and will serve as an additional source of information in the solution of the problem stated.

Supervisors Who Believe One Program Suitable For Certain Types Of Farming, But Not So Good For Other Types.

States in which supervisors believe type of farming would not influence program to be used.	: States in which supervisors believe type of farming would influence type of program to be used.
Indiana Nevada Wyoming South Carolina California Connecticut Utah Arkansas Maryland Oregon North Dakota	: Colorado : Mississippi : Michigan : Iowa : Arizona : Ohio : New Mexico : Idaho : Montana : Florida : West Virginia : Missouri : Minnesota
Total11	Total13

State supervisors of vocational agriculture are almost evenly divided as to whether certain types of farming demands a program different from other types of farming. Their opinions as shown in table XII, shows that out of twenty-four supervisors answering question number 1, as referred to in this chapter, eleven believed that the type of farming involved would affect the program to be used while thirteen state supervisors believed that one program could be used successfully in any farming community regardless of type of program in use.

Where teachers and state supervisors believed that one program might be adapted to certain kinds of farming but not so good for other types of farming, they were asked to fill in the program that in their opinion was adapted to a certain regional type of farming. Out of twenty-four supervisors answering this question only eleven

believed that the type of farming affected the program to be used. Their opinions as to the kind of program suitable for the different types of farming has been put in tabular form and is shown in Tables XIII and XIV.

Suited To Differen	t Types	of F	arming		*****
Type of Farming	: :Short	time	program:Lone	time	program
Cotton with a minimum of other crop or animal enterprises	:	20	: : :	22	
Wheat with a minimum of other crop or animal enterprises	:	12	: : :	35	
Corn belt farming	:	37	:	10	
Dairy farming	:	31	:	14	
Truck farming	:	30	: :	10	
Fruit farming	: :	34	:	9	
Beef farming	:	18	:	30	
Sugar beet farming	: :	15		30	
Tobacco farming	<u>:</u>	8		20	
Potato farming	:	20	•	22	
Sugar cane farming	:	28		14	
Hay farming	:	12		34	
Sheep farming	:	16	:	20	
Roultry farming	•	30	:	8	
Pork farming	:	28	:	12	
Other types			:		

<u>Table XIV</u>
Opinions Of State Supervisors Concerning Kind

Of Program Suited To Diffe		
	9	Long Time
Type of Farming	: Program	Program
Cotton with a minimum of other	:	
crop or animal enterprises	1	10
	•	
Wheat with a minimum of other	:	
crop or animal enterprises	: 1	10
Corn belt farming	4	7
Dairy farming	5	6
Truck farming	9	2
Fruit farming	6	5
Beef farming	3	8
Sugar beet farming	7	4
Tobacco farming	3	4
Potato farming	6	5
Sugar cane farming	4	7
Hay farming	5	6
Sheep farming	3	8
Poultry farming	9	2
Pork farming	3	8
Other types	•	

That the teachers and their state supervisors fail to agree as to the suitability of one kind of program to certain types of farming and the other program to other types, is conclusively shown in Tables XI and XII. In Table XI the teachers

are almost two to one in believing that one program is not suited to all types of farming, or that a program that is especially adapted to Missouri on account of the physical conditions there might not be adapted to Arizona.

The state supervisors in many cases failed to answer this question and their opinions were so closely divided that it shows there is lots of room for thought and study on this question. Thirteen of the supervisors of vocational agriculture believed that a program was adapted to all types of farming. A program that was taught successfully in Rhode Island could also be successfully taught in Mississippi, and they believed that the physical conditions of a state or the types of farming there had nothing to do with whether they used the long or short time program; - one program might be as successful as the other.

The opinions of the state supervisors who believed that one program might be suitable for one type of farming, but not so good for other types, is shown in TABLES XIII and XIV. That both teachers and supervisors agree on some of the program that in their opinion is suited to certain types of farming, seems to prove that there is a type of program better suited to the type of farming that is practiced in highly diversified sections. State supervisors agree, ten to one, that the long time program is especially adapted to the cotton and corn sections, while the teachers agree as a majority to this same item. That poultry is a type of farming adapted to the short time program is the belief of two-thirds of the teachers and supervisors answering this

questionnaire and is shown in the replies received in Table XIII and XIV.

The fact that both teachers and supervisors agree on the type of program suited to certain types of farming is indicative that it is a fact that one program that is suited to certain types of farming might not be suited to other types.

Table XV has been prepared from Table XIII and XIV and shows what type of farming, in the opinion of the majority of the teachers and supervisors, is best adapted to each program.

Table XV

Opinions of State Directors And Teachers Of Vocational Agriculture Concerning Kinds of Programs Suited To

Type of Farming		Long Time	:Majority fo : Long Time	r:Majority :for Short : Time
Cotton with a minimum of other crop or animal enterprises	21	32	: : : :	·
Wheat with a minimum of other crop or animal enterprises	: 13	45	* X	:
Corn belt farming	41	17	:	: x
Dairy farming	36	20	•	: x
Truck farming	39	12	•	X
Fruit farming	4 0	14	:	· x
Beef farming	21	38	: : X	
Sugar beet farming	22	34	: : X	
Tobacco farming	: 11 :	2 5	: X	

Type of Farming	: Short : Time		: Majority for : Long time :	: Majority : for Short : Time
Potato farming	: : 26	: : 27	: : X	:
Sugar cane farming	: : 32	21		: : X
Hay farming	: : 17	40	X	:
Sheep farming	: 19	28	X	:
Poultry farming	39	10		<u> </u>
Pork farming	: 31	20		X
Other types	:			

The above table is typical of the average tables for similar questions asked on most any farm problem of today. There is a variance of opinions on all farm questions. We seem to have the same in this case. If we take the opinions of the majority as a guide to the general trend, then we may say that the types of farming adapted to the long time program and the types that are adapted to the short time program as shown in Table XV is indicative of the general trend in teaching the long time program and the short time program.

CHAPTER VIII

CONCLUSIONS

In conclusion, the following facts are much in evidence:

- 1. The states using the long time program and the short time program, are not confined to any particular region or section.
- 2. The farm boys in the states using the long time program, are taking vocational agriculture over a longer period, than are the boys in the states using the short time program.
- 3. There are far too many "drop outs" at the end of the second year, in states using both programs, but it is more noticeable in the states using the short time program.
- 4. That a majority of the state supervisors of vocational agriculture prefer the long time program for teaching vocational agriculture.
- 5. The long time program is better suited to the conditions found in their state in the opinion of a majority of the teachers of vocational agriculture.
- 6. That a large majority of the teachers of vocational agriculture believe the long time program is best for preparing the farm boy for the business of farming.

- /. That either of these programs might be adapted to a particular type of farming, but not so good as other types, is the opinion of a large majority of the teachers of vocational agriculture.
- 8. The short time program is best in a one type farming region, while the long time program is best in diversified regions.
- 9. There are nine state supervisors using the short time program who believe the long time is a better program.
- 10. That in many cases the state supervisors and teachers disagree on the efficiency of the program in use in their state.
- 11. There is a general trend toward the adoption of the long time program throughout the United States.

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APPENDIX

Questionnaire sent to teachers of vocational agriculture

QUESTIONNAIRE

A COMPARATIVE STUDY OF THE RELATIVE MERITS OF THE LONG TIME PROGRAM AND THE SHORT TIME PROGRAM IN TEACHING VOCATIONAL AGRICULTURE.

(A) The long time program is the teaching of vocational agriculture over a period of two to four years, teaching both phases of agriculture(plant and animal production) each year, but with increasing difficulty each year, as:

First year from the operative viewpoint, second year managerial etc.

(B) The short time program is the teaching of vocational agriculture over a period of one or more years, teaching one phase of agriculture(plant production) one year and the other phase (animal production) the next year etc.

Please answer the following brief questions, where possible yes or no, and return to R.J.Cook, Principal, High School Perryton, Texas.

- I. Is the short time program of teaching vocational agriculture being used in your school?-----
- 2. If so, during what school year was such program started?
- 3. Is the long time program of teaching vocational agriculture being used in your school?-----
- 4. If so, during what school year was such program started?
- 5. What percent of your students of vocational agriculture take the course for one year?-----Two years?------

	- 48 -
App	endix Continued
Thr	ee years?Four years?
6.	Have you ever taught both the long and short time pro-
	grams?
7.	If so, in your opinion which program is best for en-
	couraging farm boys to stay in school?
8.	In your opinion, which program offers the best course for
- •	the boy preparing for the business of farming?
9.	In your opinion, which of these programs is the better
<i>-</i>	
	suited to the usual conditions found in your state?
	Why?
LO.	Do you believe that one of these programs would be suit-
	able for certain types of farming, but not so good for
	other types?
1.	If you answer yes to number 10, please check (X) below
	the program you believe to be better suited to each of
	the regional types of farming.
Type	of Farming Short time Program Long time Program
otte	on with a minimum
	ther crep or ani- enterprises
	with a minimum
	ther crop or ani- enterprises
	belt farming
airy	farming
ruol	farming
	growing
	beet farming
	eo farming

Type of Farming	Short	time	Program	Long	time	Program
Sugar cane farming						
Hay farming						
Sheep farming						
Poultry farming						
Pork farming				7 17 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 		
Other types						·
				,	,	

Questionnaire sent to State Supervisors of Vocational Agriculture

QUESTIONNAIRE

A COMPARATIVE STUDY OF THE RELATIVE MERITS OF THE LONG AND SHORT TIME PROGRAMS IN TEACHING VOCATIONAL AGRICULTURE.

- (A) The long time program is the teaching of vocational agriculture over a period of two to four years teaching both phases of agriculture (plant and animal production) each year, but with increasing difficulty each year, as: First year from the operative viewpoint, second year managerial, etc.
- (B) The short time program is the teaching of vocational agriculture over a period of one or more years, teaching one phase of agriculture (plant production) one year and the other phase (animal production) the next year etc.

Please answer the following brief questions, where possible yes or no, and return to Russell J. Cook, principal, of High School, Perryton, Texas.

13 How many schools in your state are this year teaching
vocational agriculture under your supervision?
2. About what percent of the students taking vocational
agriculture take the course for one year? Two years?
Three years? Four years 7. Is the short time program of teaching vocational agri-
3. Is the short time program of teaching vocational agri-
culture, being used in your state? (yes or no).
4. If so, during what school year was such program
started?19
5. Is the long time program of teaching vocational
agriculture, being used in your state? (yes or no).
6. If so, during what school year was such program
started? 19 19
7. How many schools under your supervision are using
the short time program this year? The long time
program?
program? 5. In your opinion which of these programs is the
better suited to the usual conditions found in your state?
•
Why

^{9.} Do you believe that one of these programs would be suitable for certain types of farming, but not so good

Continuation of questionnaire sent Vocational Agriculture.	to State Supervisors of
for other types? 10. If you answer yes to numbelow the program you believe to be of the regional types of farming.	per 9; please check (x) be better suited to each
Type of farming Short time	orogram Long time program
Cotton, with a mimimum of other crop, or ani- mal enterprises.	
Wheat, with a minimum of other crop, or ani- mal enterprises.	
Corn belt farming.	
Dairy farming.	
Truck farming.	
Fruit growing. Beef farming.	and the second
Sugar beet farming.	
Tobacco farming.	
Potato farming.	
Sugar cane farming.	and the state of t
Hay farming.	en de la composition
Sheep farming.	and the state of t
Poultry farming.	
Pork farming.	
Other types.	
Please give the names and addresses of three outstanding teachers of vocational agriculture in your State.	
Name	Address