

AN ANALYSIS OF TEACHING PROGRAMS IN FARM MANAGEMENT, AGRICULTURE ECONOMICS,
AND MARKETING. IN FORTY VOCATIONAL AGRICULTURE DEPARTMENTS IN
NORTHWEST OKLAHOMA

By

CLYDE MERLIN TRIPLETT

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Oklahoma State University


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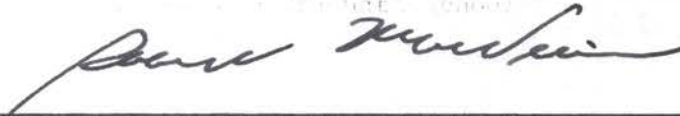
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Thesis Approved:



Major Thesis Advisor





Dean of the Graduate School

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CHAPTER I

INTRODUCTION

"Even in the Scientific Sixties, man,--not machines, nor assembly lines, nor automation--will determine the success or failure of the farm business. Management will still be the key to business success or failure. Management is a matter of judgements and decisions. We can give man aids through science--but man still has the brain power which creates the formula or directs the machine. Man has the power to observe. Machines respond to man's direction."¹

This statement emphasizes the fact that management is becoming more and more important to success in the business of farming. A mistake in a management decision 25 years ago would naturally have been costly, but today a similar mistake might very well prove disastrous. It should not be mistakenly thought that the problem is new, for Cato, a Roman philosopher, recognized that management was the key to profits on the farm even in the days of the great Roman Empire. He stated that: "The farmer should direct his efforts to two ends: profit and pleasure, one solid and the other agreeable; but he should give the preference to the pursuit of profit."²

¹L. S. Hardin, "How You Can Learn to Manage Better," Successful Farming(April, 1960), p. 96.

²Cato, Roman Farm Management

It is reasonable to assume that, considering the events of the past few years, vocational agriculture students of today will be called upon to make management decisions in the future that will possibly "dwarf" those being made by many farmers of the early sixties.

Statement of the Problem

As it was brought out by Carney, there has been the feeling for some time that the instruction in the field of Farm Management has been one of the weakest areas in the four year course of study. He stated that decision making rather than "improved practices" or "skills" must be the area in which vocational agriculture students receive accelerated training to meet the needs of present day farming.³

The apathy with which many vocational agriculture teachers have, in the past, considered the problem of farm management deserves serious consideration. The problem of just how much time is spent and how much should be spent are of real importance in planning a teaching program of farm management, agricultural economics and marketing for the farmers of tomorrow.

Purposes of the Study

The four major purposes of this study are: (1) to study the present situation of the counties involved in regard to their value, sales of agriculture products, investment, etc., in order to gain a clearer picture of the need for the study; (2) to determine how much time is actually used by vocational agriculture teachers of Northwest Oklahoma

³J. W. Carney, "Improving Instruction in Farm Management", National Conference of Head State Supervisors, Vocational Education in Agriculture, 1960, p. 45.

in the teaching of farm management, agriculture economics, and marketing; (3) to determine whether or not the time spent is considered sufficient by the teachers; (4) to determine the reasons teachers have for not using more time; and (5) to secure opinions from this group concerning the relative importance of various phases of farm management, economics and marketing.

Secondary purposes of the study are to draw conclusions and make recommendations from an analysis of the data received.

Limitations of the Study

This study is limited to a study and analysis of the teaching programs of forty vocational agriculture teachers located in departments in northwestern Oklahoma. It will be primarily confined to determining the amount of time that is being spent in teaching farm management, economics and marketing, whether or not the teachers feel that the time is adequate, and why more time is not being used. It also will include opinions concerning the importance of various topics or teaching units in these three areas.

It is not the primary purpose of the author to analyze specific farm management principles nor to determine how to best manage a farm, but rather to devote the study to finding out "where we are" in Northwest Oklahoma in the field of teaching farm management and what we should do to improve this important phase of our training program.

Methods of Procedure

The first step in this study was to formulate a questionnaire which requested certain information concerning the teaching of farm management

by vocational agriculture teachers in Northwest Oklahoma. After a conference with Dr. Robert R. Price, Head, Department of Agricultural Education, major adviser and C. L. Angerer, Professor and Head Emeritus, Department of Agricultural Education, the questionnaire and plan were formulated and approved.

The first part of the questionnaire included a summary of the amount of time which teachers reported that they had been devoting to the teaching of farm management, economics and marketing. It also requested opinions as to the adequacy of this time and reasons the teachers had for not teaching more. The second part of the survey asked for a report on sources of information being used by the teacher and an importance rating of various topics which might be included in the teaching of farm management, economics, and marketing.

In order to complete the first part of the survey form, it was necessary for the author to find out the amount of time that the teachers had previously spent in teaching farm management. This was accomplished by securing permission from the State Vocational Agriculture Supervisory Staff to examine the monthly reports of the departments in the northwest supervisory district of vocational agriculture. The monthly reports for the school year 1959-60 were examined to secure the amount of time devoted to the teaching of farm management, economics, and marketing. Since most of the departments taught only three classes of vocational agriculture each year, the reports for the school year 1958-59 were also examined to get the total for the full four years.

After examining the reports, the author used only departments where the teacher had been in the same school for at least two years. Departments in the "panhandle" counties were not included in the study. Fifty departments, located in thirteen counties, were selected. These counties are: Alfalfa, Blaine, Canadian, Dewey, Ellis, Garfield, Grant, Harper, Kingfisher, Major, Noble, Woods and Woodward.

About half of the questionnaires were completed by contacting the teachers at their regular professional improvement meetings; the rest of the responses were obtained by mailing the surveys to the teachers. Forty teachers completed the surveys.

From these questionnaires and other information, the writer was able to formulate tables, analyze data, and draw conclusions.

Definition of Terms

Farm Management J. H. Herbst defines farm management in the following way:

"Farm management is primarily a decision making process"

He further states:

"Farm management is concerned with the organization and operation of a farm for the purpose of securing the maximum net return consistent with family welfare, both in the long run and in short periods of time."⁴

Marketing Decisions and processes encountered in the handling and transferring of goods and products from the farmer to the consumer.

⁴J. H. Herbst, "What is Farm Management", The Agricultural Education Magazine, Volume 31, June 1959, p. 276.

Agricultural Economics Prices, price trends, and price-cost relationships as they affect the welfare of the farmer will be the meaning of the term as applied to this study.

CHAPTER II

REVIEW OF LITERATURE

Although the teaching of farm management, agricultural economics and marketing has always been considered very important in the vocational agriculture training program, studies with regard to the amount of time and course material have been widely neglected by writers in this field.

In a study by Beneke and Peery, the authors state that:

"Practically all programs of vocational agriculture now make some provisions for the teaching of farm management principles. However, the experience of the authors in teaching vocational agriculture suggests that the work in this area is less well defined and organized than are the other phases of the program.⁵

This study entitled: "What emphasis--in farm management teaching"⁶ pointed out that the challenge facing the vocational agriculture teacher was one of converting the thinking of the student from "improved practices" and "enterprises" to that of weighing alternatives and making decisions which will return the greatest income to the entire farm.

⁵Raymond R. Beneke, Dudley L. Perry, "What emphasis--in farm management teaching", The Agricultural Education Magazine, Volume 24, December 1951, p. 124.

⁶Ibid., p. 124.

Beneke⁷ selected a committee of ten farm business association fieldmen and ten successful farmers to evaluate and then determine the most important areas of farm management to teach to vocational agriculture students. The committee considered thirteen problem areas which were suggested by the author and rated them in importance based on the number of teaching days allotted to each area. The areas in order of importance are as follows:

1. Organizing the cropping system.
2. Organizing the livestock program.
3. Keeping farm accounts and analyzing the farm business.
4. Budgeting and planning the farm business.
5. Planning the farm power and machinery organization.
6. Adjusting production and marketing to changing prices.
7. Utilizing farm labor efficiently.
8. Making efficient use of farm buildings.
9. Adjusting to the risk involved in farming.
10. Using farm leasing arrangements.
11. Buying a farm
12. Deciding on farming as an occupation.
13. Using farm credit.

Of farm management, DeGraff and Haystead state that:

"The real problem is management. Land, equipment, labor, livestock, and production supplies are just crazy-quilt pieces until put together in a well-balanced pattern."⁸

⁷Ibid., p. 124.

⁸Herrell Degraff and Ladd Haystead, The Business of Farming, University of Oklahoma Press, 1951, pp. 171, 180, 181.

They list the following measures of success in farming as follows:

1. Efficient use of the farm labor force.
2. Rate of production per acres and per animal.
3. Balanced combination of crops and livestock.
4. Size of the farm business.

Hardin suggests some criteria by which a person may become a better manager:

- "1. Learn to sort decisions
 - (a) The small problems - where you can give answers and make decisions by habit.
 - (b) The big problem - that takes continuing study, that merits an investment in learning time.
2. Perfect the power of observation
 - (a) The keen observer identifies the situation in time to do something about it.
3. Identify the real problem
 - (a) Recognize the difference between what is and what ought to be.
4. Right decisions change
 - (a) The right decision a few years ago was to get quantity of production at any price.
 - (b) Today, income differences are closely associated with differences in efficiency--crop yields, livestock feed-conversion ratios, how much you accomplish in a day, and efficiency in use of power and machinery.
5. Take time to manage
 - (a) When we determine what, when, where operations should be done, and how we should do them, we are managers.
6. Take time to live
 - (a) After all, the principle product of our business is family, not food; it is people, not pigs; it is culture, not corn."⁹

⁹L. S. Hardin, "How You Can Learn to Manage Better", Successful Farming, April 1960, p. 96.

In a study of 751 farm records in Southern Michigan, Hart, Bond and Cunningham¹⁰ compared the labor income of various farms which possessed certain success factors in varying degrees. They found that the three factors, size of business, labor efficiency and rates of production, affected the labor income in direct proportion to the degree to which they were found on the farms. The farms which were below average in all three factors made a labor income of only \$258. Being above average in only one of the factors resulted in a labor income of approximately \$500, and above in two, about \$900 while those that were above average in all three of the factors made \$1,557.

It was pointed out in this study that under ordinary conditions large farm businesses make higher average incomes than do small businesses. Actual long range studies of farm businesses also revealed that the full use of labor resulted in increased incomes. Those farms with the highest rates of livestock production and crop production returned the most profits and that moderate specialization usually was the most profitable. When referring to "balance", as used by Hart, Bond and Cunningham,¹¹ it referred to a balance of these profit factors.

A study of Kansas State College farm management reports¹² show some interesting results. These summaries add validity to the basic

¹⁰Hart, Bond and Cunningham, p. 171.

¹¹Ibid., p. 167.

¹²J. F. Smarchek, Kansas Farm Management Studies, Kansas State College, 1958.

farm management principles advocated by early workers in the field of farm management. Kansas farm management area number three includes the counties in southwestern Kansas which adjoin the northwestern tier of counties in Oklahoma. Counties included in this study which adjoin the Kansas area are Harper, Woods, Alfalfa and Grant. This is mentioned to point out the obvious similarity between the two areas. An analysis of farm management Association No. 3 showed that the net farm income for the high 25 per cent of the farms in the area reported was \$19,398 compared to \$2,628 for the low 25 per cent in 1958. This was an increase of over 700 per cent net income for the high income group over the low income group. It is interesting to note the ways in which the high income farms differed from the low income group. The high income group was larger in almost every way; their farms averaged 1,936 acres compared to 924 acres for the low group. The high farms had more beef cattle, more feed produced and more wheat acreage (497 acres for the high compared to 249 acres for the low) than those in the low income group.

The rates of production of crops and livestock in the Kansas studies¹³ were higher for the income group in all cases. For example the high income group showed a 91 per cent calf crop compared to an 82 per cent crop for the low group. Wheat yields for the high group averaged 30 bushels per acre while the low group average 23.4 bushels per acre. The high income group invested more in fertilizers for crop production and had a higher total investment in machinery but had a lower per acre investment per acre in crop production.

¹³Ibid.

The high income group made more efficient use of labor by having 25 per cent more days of productive employment on the farm.

In summarizing the Kansas studies,¹⁴ the records showed that high farm income is the result of large volume of business, high production per animal unit, high crop yields, and an alert operator.

Hart, Bond and Cunningham,¹⁵ set forth the principles for high farm income many years before they were borne out in the Kansas Farm Management studies. They stated that high income was dependent on:

1. Size of farm business
2. Labor efficiency
3. Crop yields
4. Rates of animal production
5. Combination of enterprises

"The farm economy in America is in a state of rapid transition"¹⁶ This statement emphasizes the fact that, within a relatively short span of time, farming has changed from an almost self-sustaining occupation viewed largely as a way of life to a business enterprise that is highly specialized. Investment per farm has risen sharply and now is of such magnitude that managerial decisions become more and more important. In a fifty year period covering the period from 1907 to 1957, the total capital investment per farm in the Dryden, New York community, the average investement per farm rose from \$6,365 to \$45,994 in 1957.¹⁷

¹⁴ Ibid.

¹⁵ Hart, Bond and Cunningham, Farm Management and Marketing, p. 167.

¹⁶ Federal Reserve Bank of Kansas City, Monthly Review, October, 1957.

¹⁷ S. W. Warren, "Farm Economics", Department of Agricultural Economics, Cornell University, Ithaca, New York, March, 1957.

The monthly review of the Federal Reserve Bank of Kansas City points out that "Although it appears at times that farming is becoming a relatively insignificant part of the total economic activity, actually it is only losing its unique identity in a highly interdependent economy."¹⁸ This review points out that problems facing farmers are changing rapidly and are taking on the aspects of the problems that face other businesses. In order to produce efficiently, the farmer must not only be efficient at production, he must be familiar with such diverse fields as biology, zoology, pathology, chemistry, physics, engineering and management.

With these problems in mind, it becomes clearer that in order to accomplish the original objectives in vocational agriculture as set forth in the Vocational Division Monograph Number 21, increased emphasis must be placed on farm management teaching. These major goals are:

1. Make a beginning and advance in farming.
2. Produce farm commodities efficiently.
3. Market farm products advantageously.
4. Conserve soil and other natural resources.
5. Manage a farm business.
6. Maintain a favorable environment.¹⁹

A relatively weak situation in regard to the teaching of all phases of farm management in southwest Oklahoma was pointed out in a study by Ward²⁰ in 1960. He concluded that there was very little uniformity among

¹⁸Federal Reserve Bank of Kansas City, Monthly Review, October, 1957, p. 10.

¹⁹U. S. Office of Education, Educational Objectives in Vocational Agriculture, Vocational Division Monograph No. 21 (Washington, 1940).

²⁰Clyde L. Ward, "The Nature and Extent of Teaching Programs in Agricultural Economics, Marketing, and Farm Management in Forty Vocational Agriculture Departments in Southwest Oklahoma" (Thesis, M.S., 1960, Oklahoma State University, Stillwater).

teachers in southwest Oklahoma in regard to the amount of time devoted to teaching of farm management, economics, and marketing. His findings further revealed that about thirty per cent of the teachers taught less than 160 periods in all phases of farm management in the four year course of vocational agriculture. Ward went on to recommend that the teachers re-evaluate their teaching programs with the purpose in mind of enriching and improving their instruction in farm management instruction.

The above recommendation would appear to be in agreement with the opinion of M. H. L. Schaller who stated editorially in the January, 1957 Better Farmer Methods that "By 1976, most farmers will be buying their production skills, and concentrate their abilities on business efficiency."²¹

²¹H. L. Schaller, Better Farming Methods, January 1957.

CHAPTER III

PRESENTATION AND ANALYSIS OF DATA

The study of teaching programs in farm management, agricultural economics, and marketing is divided into two distinct parts.

- A. To determine from a study of the teaching programs of the forty teachers what they actually reported having taught in farm management, agricultural economics and marketing during the four years. This data was secured from reports which they had submitted to the State Department of Vocational Agriculture.
- B. To determine through a survey of these forty teachers what they considered important to teach in these three areas and sources of references or personnel used.

Statistical tables in this chapter are compiled primarily from responses obtained from questionnaires sent to some fifty vocational agriculture teachers in Northwest Oklahoma. These schedules sent to the teachers contained a summary of the amount of time which they reported having taught all phases of farm management, economics, and marketing in the four year course of vocational agriculture. This was according to their 1959-60 reports. These official reports are required

by the Vocational Agriculture Division of the State Department of Vocational Education, and include a complete summary of the entire teaching program of each vocational agriculture department. It was necessary to refer to the reports for the preceeding year to get the full four year total for many of the departments since a majority of the teachers taught only three classes each year and the fourth class was taught on the alternate year.

Forty responses are included in this study which includes departments in thirteen counties in Northwest Oklahoma. Seven hundred and twenty periods are at the disposal of the vocational agriculture teacher for planning the four year course of instruction.

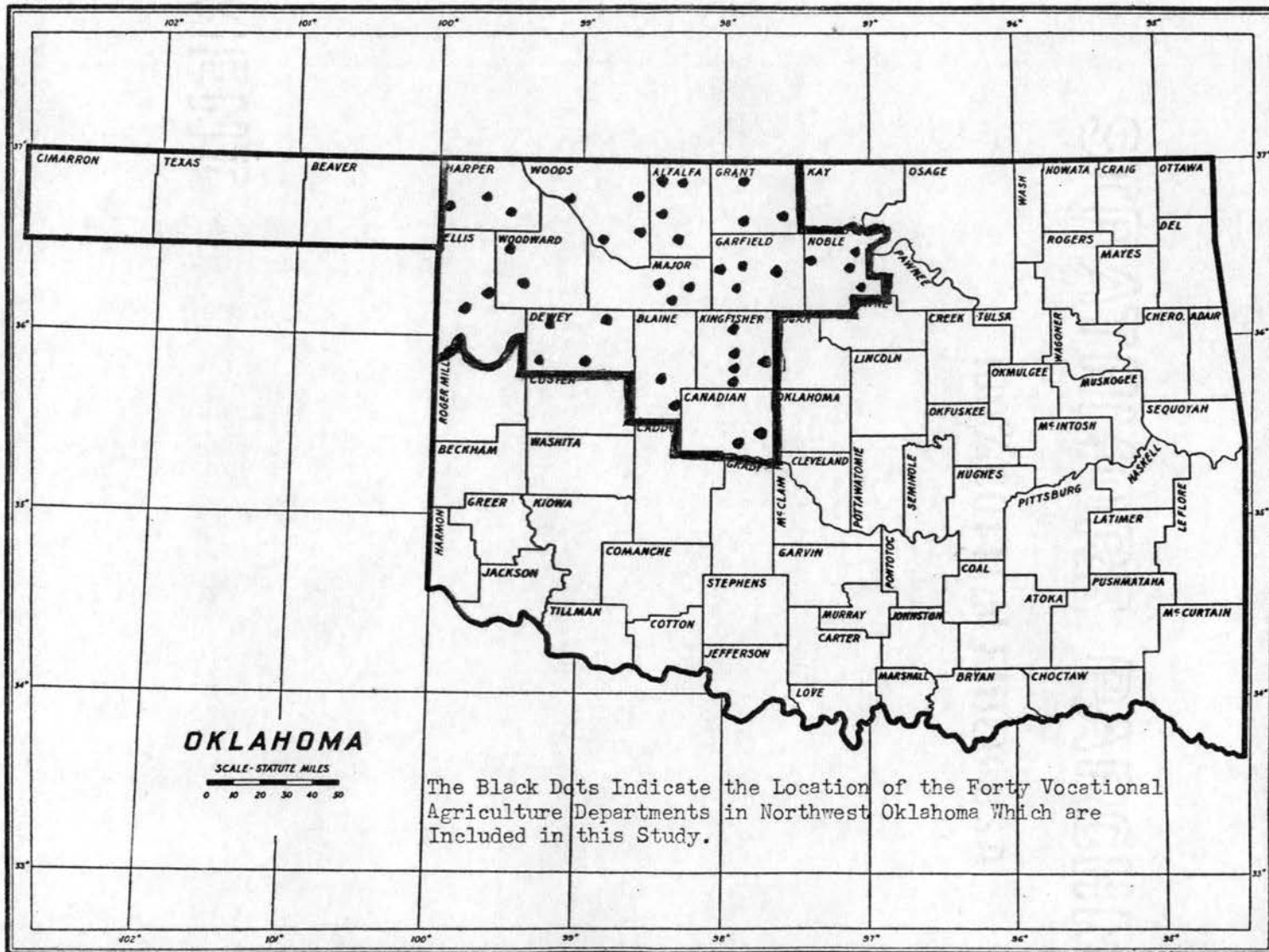


TABLE I

COUNTIES IN NORTHWEST OKLAHOMA INCLUDED IN THIS STUDY SHOWING
THE AVERAGE SIZE OF FARMS IN ACRES AND THE AVERAGE
VALUE OF LAND AND BUILDINGS*

County	No. Farms	Average Acres Per Farm	Average Value of Land and Buildings Per Farm
Alfalfa	1333	388.6	\$70,255.00
Blaine	1313	418.7	40,847.00
Canadian	1611	340.0	48,304.00
Dewey	936	629.5	41,045.00
Ellis	820	853.3	41,681.00
Garfield	1996	344.6	62,439.00
Grant	1507	412.0	66,145.00
Harper	641	992.8	57,293.00
Kingfisher	1505	375.4	47,917.00
Major	1314	438.0	36,617.00
Noble	1076	423.1	46,935.00
Woods	1205	697.7	61,485.00
Woodward	953	859.8	48,147.00

*This data was secured from the 1959 census of agriculture, U. S. Department of Commerce, Bureau of the Census, Washington, D. C.

The above study shows only the value of land and buildings. If the value of machinery, equipment and livestock were included, there is no doubt that many farms would have a total investment of \$75,000 to \$100,000.

TABLE II

FARMS BY ECONOMIC CLASS IN THE COUNTIES
IN NORTHWEST OKLAHOMA INCLUDED IN THIS STUDY*

County	No. Farms	No. Classed as Commercial Farms	Percent Classed as Commercial Farms	Economic Classes					
				No. Classed I	No. Classed II	No. Classed III	No. Classed IV	No. Classed V	No. Classed VI
Alfalfa	1333	1157	86%	70	168	382	287	220	30
Blaine	1313	1047	79%	14	87	221	357	325	90
Canadian	1611	1276	79%	46	83	336	436	300	75
Dewey	936	736	78%	16	51	178	254	185	50
Ellis	820	634	77%	17	60	139	177	164	77
Garfield	1996	1663	83%	24	146	437	631	370	55
Grant	1507	1285	85%	31	121	420	447	216	50
Harper	641	499	77%	25	58	134	168	94	20
Kingfisher	1505	1338	88%	24	145	404	429	286	50
Major	1314	1054	80%	9	70	219	350	287	119
Noble	1076	807	75%	20	64	164	257	232	70
Woods	1205	1027	85%	48	145	330	247	191	66
Woodward	953	735	77%	26	84	140	258	177	50

*This data was secured from the 1959 census of agriculture, U. S. Department of Commerce, Bureau of the Census, Washington, D. C.

"Farms by economic class - A classification of farms by economic class was made for the purpose of segregating groups of farms that are somewhat alike in their characteristics and size of operation. This classification was made in order to present an accurate description of the farms in each class and in order to provide basic data for an analysis of the organization of agriculture.

The classification of farms by economic class was made on the basis of three factors; namely, total value of all farm products sold, number of days the farm operator worked off the farm, and the relationship of the income received from nonfarm sources by the operator and members of his family to the value of all farm products sold.

In making the classification of farms by economic class, farms were grouped into two major groups, namely, commercial farms and other farms. In general, all farms with a value of sales of farm products amounting to \$1,200 or more were classified as commercial. Farms with a value of sales of \$250 to \$1,199 were classified as commercial only if the farm operator worked off the farm less than 100 days or if the income of the farm operator and members of his family received from nonfarm sources was less than the total value of all farm products sold."²²

Commercial farms were divided into six groups on the basis of the total value of all farm products sold, as follows:

Class of Farm	Value of Farm Products Sold
I -----	\$40,000 or more
II -----	20,000 to 39,999
III -----	10,000 to 19,999
IV -----	5,000 to 9,999
V -----	2,500 to 4,999
VI -----	50 to 2,499

Tables I and II are presented for the purpose of showing the economic situation of farms in the thirteen counties involved in this study. An analysis of these tables reveals that farming is "big business" in Northwest Oklahoma.

²² Department of Commerce, 1959 Census of Agriculture, Bureau of the Census, Washington, D. C.

It is interesting to note that the size of farms varies from a minimum of three hundred and forty acres in Canadian county to a maximum of nearly one thousand acres in Harper county. However, in Alfalfa county, where the average size farm is only three hundred and eighty-eight acres, the value of land and buildings is over seventy thousand dollars per farm; the greatest of any county involved in the study.

Over three-fourths of all the farms in the counties under consideration are classified as commercial farms. The percentage runs as high as eighty-eight per cent in Kingfisher county. Over six per cent of the commercial farms in Alfalfa county are rated as Class I. This classification shows that forty thousand dollars or more of products were sold from those farms during the year of the census.

With investments of such size, it is obvious that mistakes in management decisions can be extremely costly and farmers who continue to make such mistakes cannot survive.

This re-emphasizes the great importance that farm management, economics and marketing should occupy in any training program for those who plan to enter, or are engaged in the business of farming at the present. According to trends over the past twenty years, the size of the farm business has increased greatly and all indications point to a larger size with even a greater amount of capital needed to operate a profitable farm. This further shows that to manage a farm in Northwest Oklahoma, one must have a training comparable to the needs for operating a business which, in many instances, exceeds \$75,000.00.

TABLE III

NUMBER OF PERIODS REPORTED USED AND TEACHERS' S OPINIONS CONCERNING TIME
ALLOWED FOR TEACHING FARM MANAGEMENT BY FORTY TEACHERS IN
NORTHWESTERN OKLAHOMA

Periods Reported	Teachers Reporting	Indicating Time Was Insufficient		*Reasons Why More Periods Were Not Used							
		Yes	No	A	B	C	D	E	F	G	H
0-4	18	9	9	1	4	2			2	2	7
5-9	5	2	3				1		1	1	2
10-14	4	1	3				1			2	
15-19	3	3							3		
20-24	4	4							3	1	
25-up	6	6							6		
Totals	40	25	15	1	4	2	2	0	15	6	9

*Reasons Why More Periods Were Not Used:

A.-Too few boys returning to the farm to justify more time.

B.-Insufficient reference materials.

C.-Teacher not sufficiently trained to teach more.

D.-Unable to maintain interest of students.

E.-Not important to high school students.

F.-Time allotted was sufficient to meet needs of students.

G.-Do not have time.

H.-Taught in other enterprises.

Probably the most striking point revealed in the analysis of Table III is the fact that, of the 18 teachers who reported having used four or less total hours in the teaching of farm management, equally as many said that they thought the time spent was sufficient, as did those who indicated that the time was insufficient. Forty-five per cent of the reporting teachers were in this group. The remaining twenty-two teachers were rather evenly divided in the various "periods reported" classifications, with six of the teachers having taught twenty-five or more total periods on farm management. However, all teachers who reported that they taught over fourteen periods said that they considered the time sufficient to meet the needs of the students.

Ward²³ in a similar study of southwestern Oklahoma, found that only two teachers, making up only five per cent of those reporting, had taught over fourteen periods in farm management. This is in contrast with the thirty-two and five-tenths per cent in this study who said that they taught over fourteen periods.

Of the thirteen teachers in this study who had taught over fourteen periods, all but one indicated that the time spent was sufficient to meet the needs of the students. The twenty-seven teachers who taught fourteen or less periods on farm management were aware that they were not meeting the needs of the students as revealed by the fact that only three said that the time spent was sufficient. It was interesting to note, however, that nine of the group said that they taught farm management with other enterprises.

²³C. L. Ward, "The Nature and Extent of Teaching Programs in Agricultural Economics, Marketing, and Farm Management in Forty Vocational Agriculture Departments in Southwest Oklahoma." (Thesis, M.S., Oklahoma State University, Stillwater, 1960).

TABLE IV

NUMBER OF PERIODS REPORTED USED AND TEACHER'S OPINIONS CONCERNING TIME ALLOWED FOR TEACHING BUSINESS ARRANGEMENT, INCLUDING RENTING, LEASING, TITLES, AND FARM LAW BY FORTY TEACHERS IN NORTHWESTERN OKLAHOMA

Periods Reported	Teachers Reporting	Indicating Time Was Insufficient		*Reasons Why More Periods Were Not Used							
		Yes	No	A	B	C	D	E	F	G	H
0-4	28	11	17	0	9	6	1	1	4	1	6
5-9	3	2	1	0	1	0	0	0	1	1	0
10-14	5	5	0	0	0	0	0	0	5	0	0
15-19	3	3	0	0	0	0	0	0	3	0	0
20-24	1	1	0	0	0	0	0	0	1	0	0
25-up	0	0	0	0	0	0	0	0	0	0	0
Totals	40	22	18	0	10	6	1	1	14	2	6

*Reasons Why More Periods Were Not Used:

- A.-Too few boys returning to the farm to justify more time.
- B.-Insufficient reference materials.
- C.-Teacher not sufficiently trained to teach more.
- D.-Unable to maintain interest of students.
- E.-Not important to high school students.
- F.-Time allotted was sufficient to meet needs of students.
- G.-Do not have time.
- H.-Taught in other enterprises.

Seventy per cent of all the teachers who reported on the subject of periods allowed for the teaching of business arrangements, renting, leasing, titles, and farm law, had taught four or less periods on the subject. Table IV also showed that only one teacher had used as much as twenty periods on the subject. Insufficient reference material was the reason most commonly given for not using more time by the twenty-eight teachers who reported having spent four or less periods on the area.

The forty teachers were about equally divided in regard to their opinions concerning the adequacy of the time spent on this teaching unit. There was a slight majority (twenty-two to eighteen) who thought that the time was sufficient to meet the needs of the students.

There was a rather keen awareness of the need for more reference material as pointed out by the fact that twenty-five per cent of the reporting teachers gave this as the reason for not having devoted more time to the subject of business arrangements, renting, leasing, titles, and farm law. In no other area of the entire study did teachers use this reason more frequently.

Only three of the nine divisions of farm management surveyed in this study ranked below business arrangements in terms of hours allowed by the forty teachers. A total of one hundred sixty-five hours were used which is an average of slightly over four hours per teacher.

TABLE V

NUMBER OF PERIODS REPORTED USED AND TEACHER'S OPINIONS CONCERNING TIME ALLOWED FOR TEACHING, PLANNING AND ORGANIZATION, INCLUDING BUDGETS AND COMBINATIONS OF ENTERPRISES BY FORTY TEACHERS IN NORTHWESTERN OKLAHOMA

Periods Reported	Teachers Reporting	Indicating Time Was Sufficient		*Reasons Why More Periods Were Not Used							
		Yes	No	A	B	C	D	E	F	G	H
0-4	33	6	27	1	5	5	3	0	2	5	11
5-9	3	0	3	0	1	0	1	0	1	0	0
10-14	2	0	2	0	0	0	1	0	0	1	0
15-19	1	1	0	0	0	0	0	0	1	0	0
20-24	1	1	0	0	0	0	0	0	1	0	0
25-up	0	0	0	0	0	0	0	0	0	0	0
Totals	40	8	32	1	6	5	5	0	5	6	11

*Reasons Why More Periods Were Not Used:

A.-Too few boys returning to the farm to justify more time.

B.-Insufficient reference materials.

C.-Teacher not sufficiently trained to teach more.

D.-Unable to maintain interest of students.

E.-Not important to high school students.

F.-Time allotted was sufficient to meet needs of students.

G.-Do not have time.

H.-Taught in other enterprises.

Data compiled in Table V showed that teachers in Northwest Oklahoma averaged teaching only two and three-tenths periods on the subject of planning and organization, including budgets, and combinations of enterprises. This unit ranked seventh out of nine in regard to the total hours used by teachers.

It is significant to note that eighty per cent, the highest number for any phase of the study, indicated that the time spent in teaching the subject was insufficient. Eleven teachers said that they had taught planning and organization under other enterprises. Other reasons given for not having used more time, according to their frequency used were: Insufficient reference materials, not enough time, teacher not sufficiently trained to teach more, unable to maintain interest of students, time allotted was sufficient to meet the needs of the students, and too few boys returning to the farm to justify more time. No teacher thought that the subject was unimportant to high school students.

While ninety per cent of the teachers in this study taught less than ten periods in the subject of planning and organization, quite opposite results were obtained by Ashley²⁴ who found that fifty-two per cent of the teachers in Southeast Oklahoma taught over ten periods on the unit.

Data revealed in this study showed that while thirty-three teachers had used from zero to four periods, thirty had actually reported no hours at all in the area of planning and organization.

²⁴G. H. Ashley, "A Study of the Amount of Time Devoted to Teaching Farm Management, Marketing, and Economics in the Four Year Course of Study in Forty-Three Vocational Agriculture Departments in Southeast Oklahoma." (Non-Thesis Report, Oklahoma State University, Stillwater, 1960).

TABLE VI

NUMBER OF PERIODS REPORTED USED AND TEACHER'S OPINIONS CONCERNING TIME
ALLOWED FOR TEACHING FEDERAL AGENCIES AND POLICIES BY
TEACHERS IN NORTHWESTERN OKLAHOMA

Periods Reported	Teachers Reporting	Indicating Time Was Sufficient		*Reasons Why More Periods Were Not Used							
		Yes	No	A	B	C	D	E	F	G	H
0-4	38	12	26	1	9	1	3	1	2	4	17
5-9	1	1	0	0	0	1	0	0	0	0	0
10-14	1	1	0	0	0	0	0	0	1	0	0
15-19	0										
20-24	0										
25-up	0										
Totals	40	14	26	1	9	2	3	1	3	4	17

*Reasons Why More Periods Were Not Used:

A.-Too few boys returning to the farm to justify more time.

B.-Insufficient reference materials.

C.-Teacher not sufficiently trained to teach more.

D.-Unable to maintain interest of students.

E.-Not important to high school students.

F.-Time allotted was sufficient to meet needs of students.

G.-Do not have time.

H.-Taught in other enterprises.

Table VI shows that ninety-five per cent of the teachers used four or less periods in teaching about federal Agencies and their policies. Twenty-six of these thirty-eight teachers who taught four or less hours said that they considered the time spent insufficient to meet the needs of the students. Although seventeen teachers said that they included some instruction on the subject of federal agencies with their teaching of other subjects, it seems pertinent to reveal that only five of the forty actually recorded any teaching of federal agencies as such. The total of twenty-nine periods used by all the teachers gives the subject the distinction of being the division of instruction most neglected by the forty teachers in Northwest Oklahoma.

Twenty-two and five-tenths per cent of the teachers said that insufficient reference material was the determining factor in the rather universal ignoring of instruction in the field of federal agencies and policies.

A special farm business short course set up for vocational agriculture teachers by Oklahoma State University on the subject of federal agencies and policies during the Summer of 1961 should be of help to vocational agriculture teachers. One might interpret the scheduling of this course as a recognition by university officials of the need for a better understanding by vocational agriculture teachers on the subject of federal agencies and policies.

TABLE VII

NUMBER OF PERIODS REPORTED USED AND TEACHER'S OPINIONS CONCERNING TIME
ALLOWED FOR TEACHING TAXES AND SOCIAL SECURITY BY
FORTY TEACHERS IN NORTHWESTERN OKLAHOMA

Periods Reported	Teachers Reporting	Indicating Time Was Sufficient		*Reasons Why More Periods Were Not Used							
		Yes	No	A	B	C	D	E	F	G	H
0-4	33	6	27	1	6	12	3	1	1	2	6
5-9	6	6	0	0	0	1	0	0	5	0	0
10-14	1	0	0	0	0	0	0	0	1	1	0
15-19	0										
20-24	0										
25-up	0										
Totals	40	13	27	1	6	13	3	1	7	3	6

*Reasons Why More Periods Were Not Used

A.-Too few boys returning to the farm to justify more time.

B.-Insufficient reference materials.

C.-Teacher not sufficiently trained to teach more.

D.-Unable to maintain interest of students.

E.-Not important to high school students.

F.-Time allotted was sufficient to meet needs of students.

G.-Do not have time.

H.-Taught in other enterprises.

An examination of the data found in Table VII reveals that there were more than twice as many teachers who regarded the time spent on teaching taxes and social security as insufficient as there were those who were satisfied with the time spent on this subject.

The twelve teachers who included taxes and social security instruction in their teaching program, spent a total of sixty-one periods on this area which came to an average of slightly over five periods per teacher. The teaching of taxes and social security ranked eighth out of the nine divisions surveyed in this study in regard to the total hours devoted to the instruction. The lack of training of the teacher was the most commonly used reason for not spending more time on taxes and social security. This reason was used nearly twice as frequently as the next most commonly used reason which was; time allotted was sufficient to meet the needs of the students.

Six of the seven teachers who spent over four class periods teaching taxes indicated that the time used was sufficient.

TABLE VIII

NUMBER OF PERIODS REPORTED USED AND TEACHER'S OPINIONS CONCERNING TIME ALLOWED FOR TEACHING MARKETING OF LIVESTOCK, CROPS, AND PRODUCE BY FORTY TEACHERS IN NORTHWESTERN OKLAHOMA

Periods Reported	Teachers Reporting	Indicating Time Was Insufficient		*Reasons Why More Periods Were Not Used							
		Yes	No	A	B	C	D	E	F	G	H
0-4	29	14	15	0	2	1	1	0	1	2	22
5-9	3	2	1	0	1	0	0	0	2	0	0
10-14	4	3	1	0	0	0	0	0	3	1	0
15-19	0										
20-24	1	1	0	0	0	0	0	0	1	0	0
25-up	3	3	0	0	0	0	0	0	3	0	0
Totals	40	23	17	0	3	1	1	0	10	3	22

*Reasons Why More Periods Were Not Used:

- A.-Too few boys returning to the farm to justify more time.
- B.-Insufficient reference materials.
- C.-Teacher not sufficiently trained to teach more.
- D.-Unable to maintain interest of students.
- E.-Not important to high school students.
- F.-Time allotted was sufficient to meet needs of students.
- G.-Do not have time.
- H.-Taught in other enterprises.

The importance of the teaching of marketing in the opinions of forty vocational agriculture teachers in Northwest Oklahoma was emphasized by the fact that the teachers spent one hundred and ninety periods on the subject. Table VIII shows that slightly over seventy-four per cent of the teachers devoted between zero and four periods to the subject of marketing. While it is true that the average hours spent on marketing per teacher averaged nearly five hours, it should be pointed out that twenty-six or sixty-five per cent of the instructors allowed no time at all for the unit. Twenty-two of the teachers indicated that they included some marketing instruction in with the various enterprises. None of the teachers questioned thought that the subject of marketing was unimportant to high school students but twenty-five per cent of the teachers indicated that they thought the time allotted was sufficient.

According to Hopkins,²⁵ the most important point to consider on the subject of marketing is the wants of the market. The farm production should be adjusted then, as far as possible, to the situation as it exists or as it appears likely to exist when the products are ready for sale. The fact that such a large per cent of the teachers (fifty-five per cent) said that they taught some marketing with individual enterprises, would be in keeping with this hypothesis.

²⁵J. A. Hopkins, W. G. Murray, Elements of Farm Management, Prentice-Hall, 1953, p. 414.

TABLE IX

NUMBER OF PERIODS REPORTED USED AND TEACHER'S OPINIONS CONCERNING TIME
ALLOWED FOR TEACHING ECONOMICS, AGRICULTURAL PRICES, AND
TRENDS BY FORTY TEACHERS IN NORTHWESTERN OKLAHOMA

Periods Reported	Teachers Reporting	Indicating Time Was Sufficient		*Reasons Why More Periods Were Not Used							
		Yes	No	A	B	C	D	E	F	G	H
0-4	27	14	13	0	2	1	0	0	6	2	16
5-9	4	3	1	0	1	0	0	0	3	0	0
10-14	2	1	1	0	0	0	1	0	1	0	0
15-19	4	2	2	0	0	0	0	0	1	2	1
20-24	1	1	0	0	0	0	0	0	1	0	0
25-up	2	2	0	0	0	0	0	0	2	0	0
Totals	40	23	17	0	3	1	1	0	14	4	17

*Reasons Why More Periods Were Not Used:

A.-Too few boys returning to the farm to justify more time.

B.-Insufficient reference materials.

C.-Teacher not sufficiently trained to teach more.

D.-Unable to maintain interest of students.

E.-Not important to high school students.

F.-Time allotted was sufficient to meet needs of students.

G.-Do not have time.

H.-Taught in other enterprises.

Table IX shows that thirteen teachers spent five or more periods on the subject of economics, agricultural prices and trends. While it is true that the average periods devoted to this area is slightly in excess of five hours per teacher, it should be pointed out that this amount is the total for the four year course of study in vocational agriculture and includes seven hundred and twenty class periods. It is also significant to reveal that exactly half of the teachers spent no time at all on economics and that two spent over twenty-five periods.

Forty-two and five-tenths per cent of the teachers said that the time spent on economics was not sufficient and the reasons they gave for not using more time according to the frequency of use were: taught in other enterprises, time allotted was sufficient to meet the needs of the students, do not have time, insufficient reference material, teacher not sufficiently trained, and unable to maintain interest of students.

Heady²⁶ points out the importance of economics by emphasizing that farm profits or losses are more dependent on prices than any other factor. Since prices are, in turn, determined by supply, farmers must decide what and how much to produce by predicting future prices. Even though predicting of future prices is not easy because of so many variables, Heady believes that farmers who are well informed about these variables can come close to foretelling future prices.

²⁶E. O. Heady, H. R. Jensen, Farm Management Economics (Prentice Hall, 1955), p. 480.

TABLE X

NUMBER OF PERIODS REPORTED USED AND TEACHER'S OPINIONS CONCERNING TIME
ALLOWED FOR TEACHING CREDIT, FINANCING,
AND BANKING BY FORTY TEACHERS IN
NORTHWESTERN OKLAHOMA

Periods Reported	Teachers Reporting	Indicating Time Was Insufficient		*Reasons Why More Periods Were Not Used							
		Yes	No	A	B	C	D	E	F	G	H
0-4	30	9	21	0	2	6	2	0	2	6	12
5-9	4	3	1	0	0	0	0	0	2	0	2
10-14	2	2	0	0	0	0	0	0	2	0	0
15-19	0										
20-24	2	2	0	0	0	0	0	0	2	0	0
25-up	2	2	0	0	0	0	0	0	2	0	0
Totals	40	18	22	0	2	6	2	0	10	6	14

*Reasons Why More Periods Were Not Used:

- A.-Too few boys returning to the farm to justify more time.
- B.-Insufficient reference material.
- C.-Teacher not sufficiently trained to teach more.
- D.-Unable to maintain interest of students.
- E.-Not important to high school students.
- F.-Time allotted was sufficient to meet needs of students.
- G.-Do not have time.
- H.-Taught in other enterprises.

"The purpose of credit is to increase efficiency, or incomes and levels of living. A farmer should not use credit, or borrow, only when his back is to the wall; borrowing only as a last resort is negative and is not likely to result in high incomes or living levels."²⁷

Heady, in Farm Management Economics, further states:

"Credit is a valuable asset for farmers with limited capital and most farmers have limited capital."²⁸

Table X shows that vocational agriculture teachers in northwest Oklahoma generally recognize that their instruction in credit, financing, and banking is deficient. Twenty-two out of the forty teachers included in this study said that the time spent on credit was insufficient to meet the needs of the students. Seventy-five per cent of the teachers indicated that they spent four or less periods on credit. Four teachers devoted between five and nine periods, two spent between ten and fourteen, two used between twenty and twenty-four, and two devoted as much as twenty-five or more hours to the subject. The total time spent by the forty teachers was one hundred and sixty-seven hours, which is slightly over four hours per teacher figured on an average basis. A study of the data, however, shows that fifteen teachers or thirty-seven and five-tenths per cent actually amassed the entire one hundred and sixty-seven hours, and twenty-five of the teachers recorded no periods at all on the subject.

²⁷ Ibid., 591-92.

²⁸ Ibid., 592.

TABLE XI

NUMBER OF PERIODS REPORTED USED AND TEACHER'S OPINIONS CONCERNING TIME
ALLOWED FOR TEACHING RECORDS AND RECORD KEEPING BY FORTY
TEACHERS IN NORTHWESTERN OKLAHOMA

Periods Reported	Teachers Reporting	Indicating Time Was Sufficient		*Reasons Why More Periods Were Not Used							
		Yes	No	A	B	C	D	E	F	G	H
0-24	4	3	1	0	0	0	0	0	2	1	1
25-49	8	7	1	0	0	0	1	0	7	0	0
50-74	12	11	1	0	0	0	0	0	11	1	0
75-99	6	5	1	0	0	0	0	0	5	0	1
100-124	5	5	0	0	0	0	0	0	5	0	0
125-149	2	2	0	0	0	0	0	0	2	0	0
150-up	3	2	1	0	0	0	0	0	2	1	0
Totals	40	35	5	0	0	0	1	0	34	3	2

*Reasons Why More Periods Were Not Used:

A.-Too few boys returning to the farm to justify more time.

B.-Insufficient reference materials.

C.-Teacher not sufficiently trained to teach more.

D.-Unable to maintain interest of students.

E.-Not important to high school students.

F.-Time allotted was sufficient to meet needs of students.

G.-Do not have time.

H.-Taught in other enterprises.

"Nothing before in history has done so much as the income tax to stimulate farmer interest in keeping books."²⁹

A study of Table XI shows that all of the vocational agriculture teachers included in this study have included the keeping of records in their teaching programs. The data summarized in making Table XI reveals that the average vocational agriculture teacher in northwest Oklahoma spends about thirty minutes per week on the keeping of farm records.

Only twelve and one-half per cent of the teachers indicated that the time allotted was insufficient to meet the needs of the students. Twelve teachers devoted between fifty and seventy-four periods per year to record keeping and three actually spent as much as one hundred and fifty hours on records during the four year course of study. Every teacher who used as many as one hundred hours on records thought that the time was sufficient.

Teachers participating in this study are obviously doing a better job of records and record keeping than any other phase of farm management. The fact that each student is required to keep a record book probably accounts for the fact that so much time is devoted to this subject. Even so, it is interesting to note that two teachers used as little as fifteen periods while one teacher spent one hundred and eighty-five hours. It should be remembered that a teacher who spends only fifteen hours is, in reality, using less than seven minutes per week for all record keeping.

²⁹H. DeGraff, L. Haystead, The Business of Farming (University of Oklahoma Press, 1951), p. 220.

TABLE XII
 TOTAL NUMBER OF PERIODS REPORTED USED IN TEACHING AGRICULTURAL
 ECONOMICS, MARKETING, AND FARM MANAGEMENT BY
 FORTY TEACHERS IN NORTHWESTERN OKLAHOMA

Periods Reported	Teachers Reporting
0-24	0
25-49	4
50-74	6
75-99	7
100-124	9
125-149	5
150-174	4
175-199	3
200-224	1
225-up	1
Total	40

Most writers in the field of farm management are in agreement with the statement that decision making is becoming the most important part of farming. Are vocational agriculture teachers preparing their students for this task? Table XII shows that nine teachers devoted between one hundred and one hundred and twenty-four periods to all farm management teaching. No teacher taught less than twenty-four hours and one used over two hundred and twenty-five hours. The average number of periods used was about one hundred and twelve for the four year course.

TABLE XIII
 REASONS GIVEN BY FORTY VOCATIONAL AGRICULTURE INSTRUCTORS
 IN NORTHWESTERN OKLAHOMA WHY MORE TIME WAS
 NOT SPENT IN TEACHING AGRICULTURAL
 ECONOMICS, MARKETING, AND
 FARM MANAGEMENT

Rank	Reason Given	Number of Times Used
1	F-Time allotted was sufficient to meet the needs of the students	112
2	H-Taught in other enterprises	104
3	G-Do not have time	37
4	C-Teacher not sufficiently trained to teach more	36
5	B-Insufficient reference materials	33
6	D-Unable to maintain interest of students	19
7	A-Too few boys returning to the farm to justify more time	4
8	E-Not important to high school students	3

Close scrutiny of Table XIII shows some interesting features. As might have been expected, the most frequently named reason for not using more time in teaching all farm management by the forty teachers in this study was: time allotted was sufficient to meet the needs of the students. However, nearly as many said that they taught the subject in other enterprises. This would seem to indicate that the teachers were not doing a good job of accurately reporting their teaching programs or that they did not have a clear understanding of what constitutes farm management

teaching. Time allotted was sufficient to meet the needs of the students (F), and taught in other enterprises (H) were the reasons most frequently used in all but one of the first nine tables. Teacher not sufficiently trained to meet the needs of the students was most frequently used in Table VII. As was pointed out in the analysis of that particular table, it would seem to indicate a need for resource personnel to help with the subject of taxes or else the teachers need additional training.

TABLE XIV
 DISTRIBUTION ACCORDING TO YEARS OF TEACHING EXPERIENCE
 OF FORTY VOCATIONAL AGRICULTURE TEACHERS IN
 NORTHWEST OKLAHOMA

Number Years Teaching Experience	Number of Teachers	Percentage of Total
0-4	7	17.5
5-9	11	27.5
10-14	16	40.0
15-19	3	7.5
20-up	3	7.5

Table XIV shows that only fifteen per cent of the teachers in this study have taught over fourteen years. Forty per cent of the teachers included in the study were in the ten to fourteen years of teaching experience group. The primary purpose of this table is to gain a clearer picture of Table XV.

TABLE XV

THE RELATIONSHIP OF THE NUMBER OF YEARS TEACHING EXPERIENCE TO THE NUMBER OF HOURS SPENT TEACHING AGRICULTURAL ECONOMICS, MARKETING, AND FARM MANAGEMENT BY FORTY TEACHERS IN NORTHWESTERN OKLAHOMA

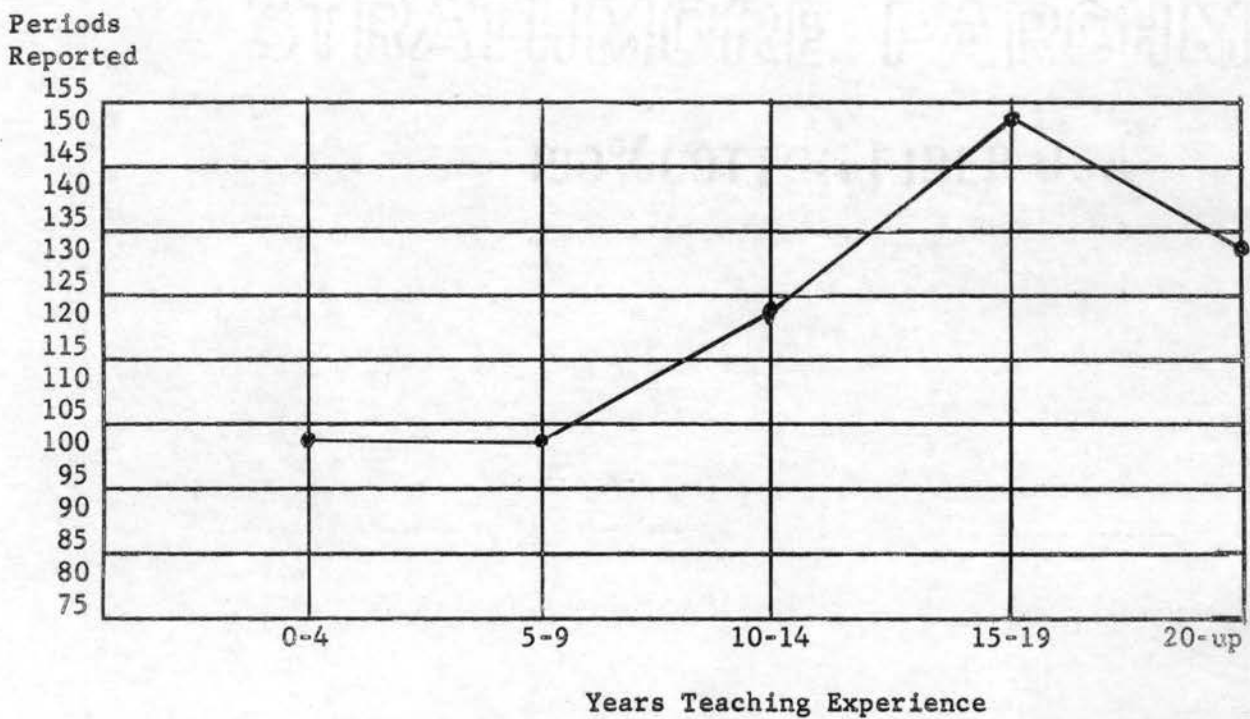


Table XV shows that the amount of time devoted to teaching of farm management increased in direct proportion to the years of teaching experience up to the last "years of experience group". This could be interpreted to mean various things. The author believes that teachers spend more time on all farm management teaching for two reasons: First, the teacher gains in confidence in his ability to competently teach farm management and, second, close experience with farming in the community increases his appreciation of the relative importance of farm management. No explanation is made for the fact that the last experience group showed a drop in hours taught except that only three teachers were in this group. One of these three taught only ninety-eight hours on all phases of farm management, economics, and marketing.

TABLE XVI

A COMPARISON BETWEEN THE TOTAL NUMBER OF PERIODS TAUGHT IN ALL FARM MANAGEMENT AND THE AVERAGE LABOR INCOME PER STUDENT OF FORTY VOCATIONAL AGRICULTURE DEPARTMENTS IN NORTHWEST OKLAHOMA

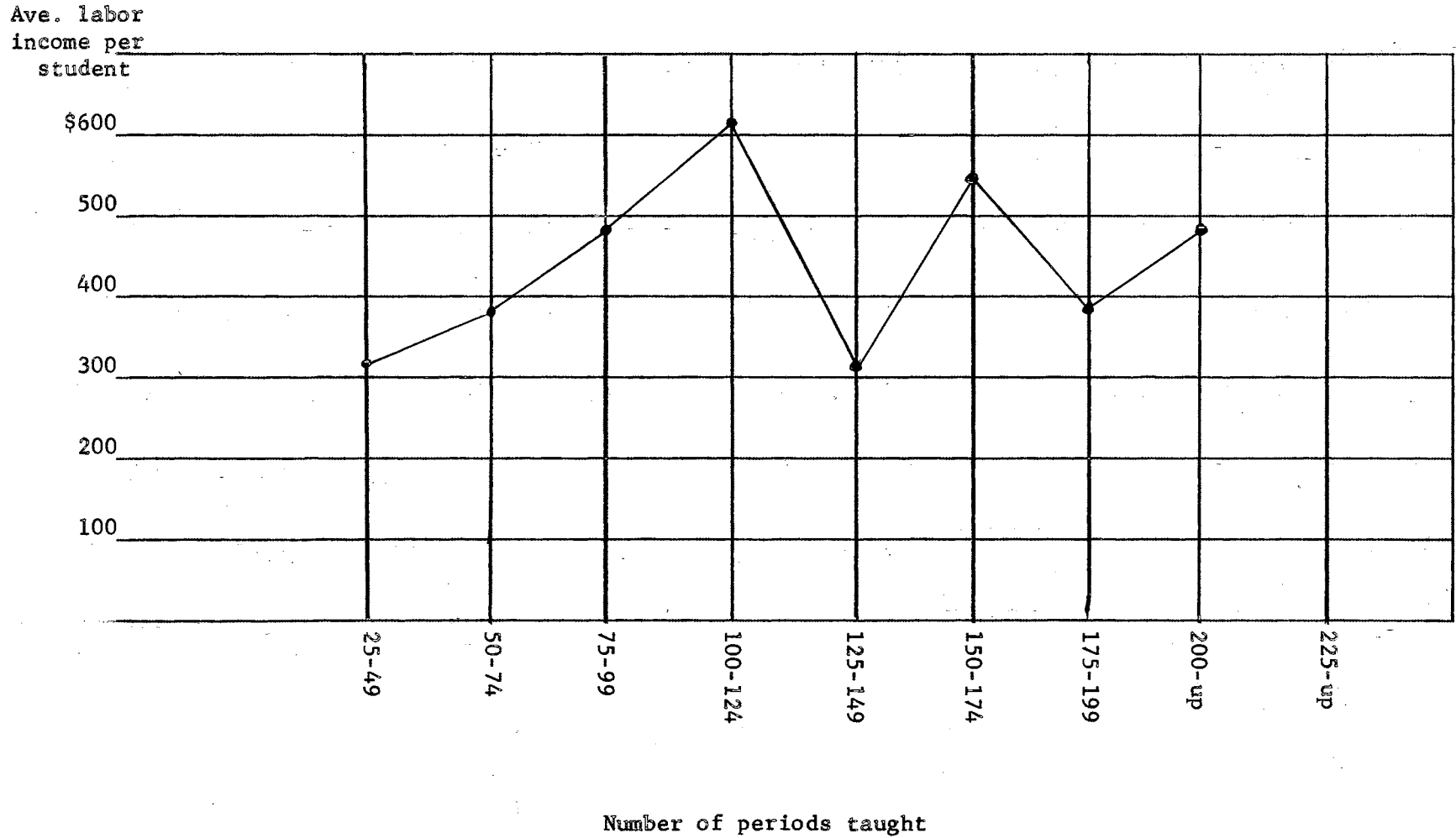


TABLE XVII

RATINGS GIVEN BY FORTY TEACHERS IN NORTHWESTERN OKLAHOMA AS TO THE RELATIVE IMPORTANCE OF VARIOUS TEACHING UNITS OF AGRICULTURAL ECONOMICS, MARKETING, AND FARM MANAGEMENT TO VOCATIONAL AGRICULTURE STUDENTS

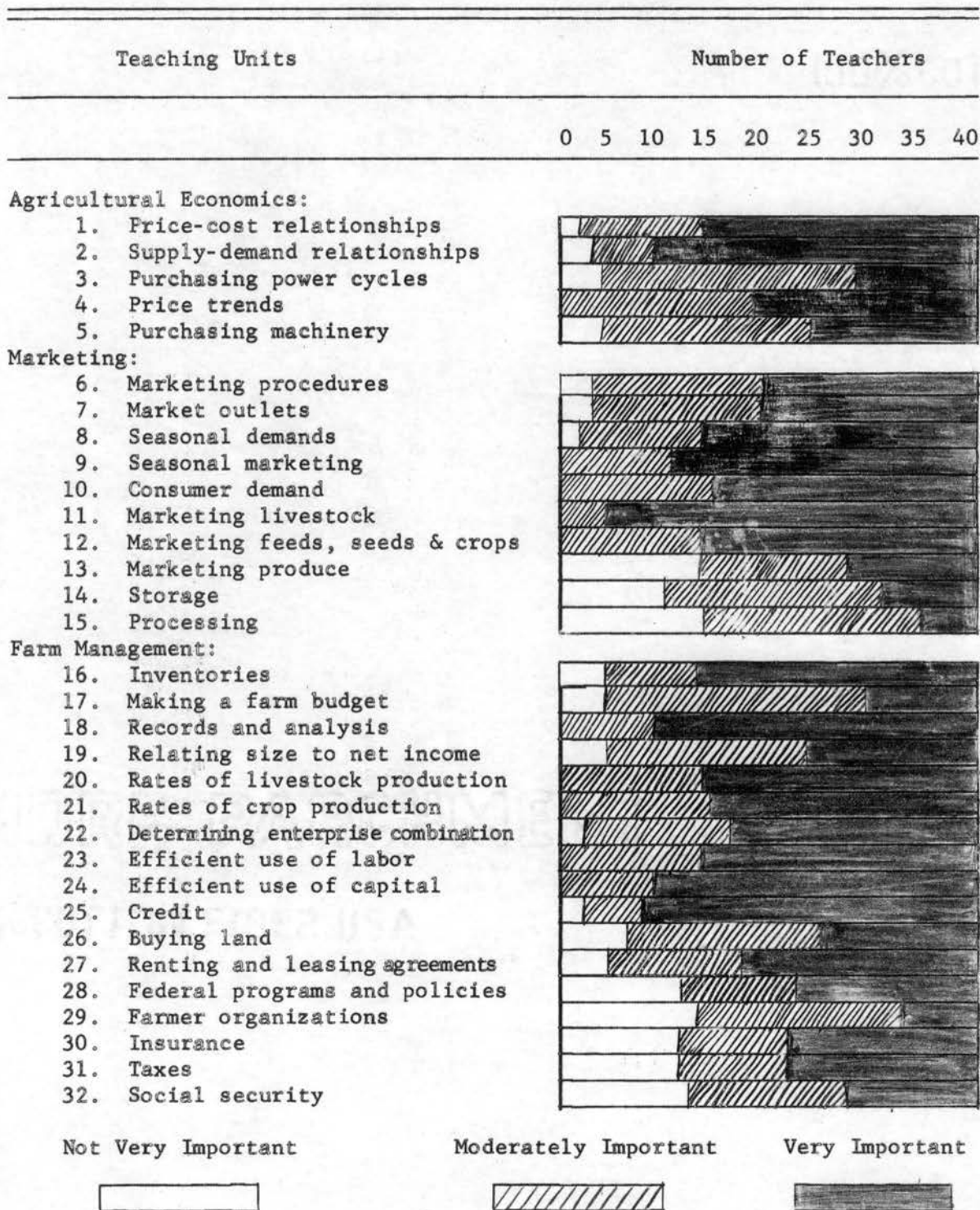


TABLE XVIII

COMPOSITE RATINGS OF THE IMPORTANCE OF VARIOUS UNITS IN AGRICULTURAL ECONOMICS, MARKETING, AND FARM MANAGEMENT ACCORDING TO THE OPINIONS OF FORTY VOCATIONAL AGRICULTURE TEACHERS IN NORTHWESTERN OKLAHOMA

Rank	Teaching Unit	Importance			Total	Composite Rating
		Not Very	Mod.	Very		
1	- Marketing livestock	0	8	108	116	2.90
2	- Efficient use of capital	0	12	102	114	2.85
3	- Records and analysis	0	14	99	113	2.82
	Credit	1	10	102	113	2.82
5	- Seasonal marketing	0	24	84	108	2.70
6	- Rates of livestock production	0	26	81	107	2.67
	Efficient use of labor	0	26	81	107	2.67
8	- Supply-demand relationships	3	16	87	106	2.65
	Marketing feeds and seeds	0	28	78	106	2.65
	Rates of crop production	0	28	78	106	2.65
11	- Seasonal demands	1	26	78	105	2.62
12	- Consumer demand	0	32	72	104	2.60
13	- Determining enterprise combinations	1	30	72	103	2.57
14	- Price-cost relationships	1	28	72	101	2.52
15	- Price trends	0	36	63	99	2.47
16	- Marketing procedures	2	36	60	98	2.45
	Market outlets	2	36	60	98	2.45
18	- Renting and leasing agreements	4	32	60	96	2.40
19	- Inventories	3	20	72	95	2.37
20	- Insurance	5	36	51	92	2.30
21	- Purchasing machinery	6	34	51	91	2.27
	Relating size of business to net income	2	44	45	91	2.27
	Federal programs and policies	7	30	54	91	2.27
24	- Taxes	4	38	48	90	2.25
25	- Purchasing power cycles	4	50	33	87	2.17
	Buying land	4	44	39	87	2.17
27	- Social security	7	38	39	84	2.10
28	- Making a budget	3	50	30	83	2.07
29	- Storage	11	40	27	78	1.95
30	- Farm organizations	8	50	18	76	1.90
31	- Marketing produce	13	32	30	75	1.87
32	- Processing	15	40	15	70	1.75

- (1) A score of three was given for each answer of very important, two for moderately important, and one for not very important.
- (2) Possible total score was 120, and possible composite rating was 3.0.

Tables XVII and XVIII show the opinions of forty vocational agriculture teachers in Northwest Oklahoma concerning the relative importance of thirty-two different teaching units in the field of farm management instruction. One hundred and eight teachers rated marketing of livestock as "very important" which was the highest score received for any unit included in the study. There is some variation between this rating and the time actually devoted to teaching of all marketing including livestock, crops and produce, as revealed in the analysis of Table VI. However, since this unit concerns specifically livestock marketing, the difference can certainly be reconciled. The teachers rated marketing procedures and market outlets in sixteenth place and their composite score was 2.45 compared to the composite score of 2.90 for marketing of livestock.

It is interesting to note that records and record keeping ranked third in the teachers ratings of the comparative importance of the various units while at the same time, in actual practice, they devote much more time to records than to any other phase of farm management.

Federal programs and policies received a relatively low composite rating and it should be pointed out that, in their teaching programs, the forty vocational agriculture teachers included in this study spent less time on federal programs than on any other unit.

A study of Tables XVII and XVIII should be helpful to a teacher in determining what units to include in his farm management teaching program.

Table XVI was compiled to see if there was any relationship between the total number of hours spent teaching farm management and the average labor income of the students within the vocational agriculture departments

in the various "number of periods taught" categories. The average labor incomes of the departments were secured from the Oklahoma State Department of Vocational Agriculture for the same year as for the rest of the study. There does not seem to be any great difference although there is possibly a slight difference in favor of the departments where more total hours were used in farm management teaching. Differences between soil types and types of farming would be other factors to consider in analyzing this table.

Tables XVII, XVIII and XIX are compiled from responses made by forty vocational agriculture instructors in Northwest Oklahoma. These responses, from the second page of the questionnaire presented to the teachers, asked them to rate the relative importance of thirty-two units which should be included in a teaching program. Each unit was to be marked by the teacher as "Not very", "Moderately" or "Very", in regard to its relative importance. The cooperating teachers also listed the sources of reference materials or personnel which they used in their instruction programs in farm management, economics and marketing.

TABLE XIX

SOURCES OF INFORMATION OR RESOURCE PERSONNEL NOW BEING USED BY FORTY
 VOCATIONAL AGRICULTURE TEACHERS IN NORTHWEST OKLAHOMA
 IN TEACHING AGRICULTURAL ECONOMICS, MARKETING,
 AND FARM MANAGEMENT

Rank	Information Source	Number of Teachers Using
1	Books	32
	Charts	32
	Bulletins	32
4	Magazines	31
5	Bankers	20
6	Farm Credit Administration	18
7	Doane Agricultural Digest	17
8	Commission Firms	15
9	*Films	4
10	*Soil Conservation Service	3
11	*Agriculture Outlook Releases	2
	*Successful Farmers of Community	2
13	*Agriculture Stabilization Commission	1
	*Farm Home Administration	1
	*Insurance Personnel	1
	*Personal survey	1

*These sources not suggested in questionnaire. (Volunteered by teachers under "other sources")

Table XIX shows that over three-fourths of the teachers included in this study used books, charts, bulletins, and magazines in teaching farm management. Relatively fewer teachers used such resource personnel as farm credit administration workers, bankers and commission firm representatives.

The most interesting observation that can be made from a study of this table, however, is that so many other sources of information were volunteered by the teachers. Each information source preceded by an asterisk was not listed on the questionnaire but was suggested by the teachers under "other sources". It would seem reasonable to assume that these sources would have been mentioned much more frequently if they had been listed on the survey form.

CHAPTER IV

SUMMARY AND CONCLUSIONS

In making a summary and drawing conclusions of this study, it should be helpful to review the purposes which were outlined in Chapter I. The purposes, as originally stated, were: (1) to study the present situation of the counties involved in regard to their value, farm sales, investment, etc. in order to gain a clearer picture of the need for the study; (2) to determine how much time is actually used by vocational agriculture teachers of Northwest Oklahoma in teaching farm management, agriculture economics and marketing; (3) to determine whether or not the time spent is considered sufficient by the teachers; (4) to find the reasons that the teachers have for not using more time in this area; and (5) to secure opinions from this group concerning the relative importance of various phases of farm management, economics and marketing.

The thirteen counties included in this study comprise a highly valuable and productive section of the state of Oklahoma. The need for intensive training in farm management and a clear understanding of the principles of agriculture economics and marketing are emphasized by the fact that the average value of land and buildings alone on farms in this area is somewhere in excess of fifty thousand dollars.

The importance of correct decisions concerning farm management is shown by the fact that a majority of the farms in this area market products which have an average value of nearly \$10,000. In an area where over three-fourths of the farms are classed as commercial farms, it can readily be seen that future farmers must have sound training in farm management. As Dr. P. H. Stephens of the Federal Land Bank of Wichita, Kansas, stated at the Vocational Agriculture Teachers Conference at Oklahoma State University on June 5, 1959, "The 1975 farmer will be a manager, not a plowboy".

The forty vocational agriculture teachers in Northwest Oklahoma who responded on the subject of the amount of time devoted to farm management teaching were widely divided concerning their opinions on whether or not the time spent was sufficient to meet the needs of the students. Forty-five per cent taught four or less periods on this subject while nine instructors stated that they taught farm management with other enterprises. All but one of the instructors who devoted fourteen or more hours to this area said that the time was sufficient.

Insufficient reference material was the reason given most commonly for not using more time by the twenty-eight instructors who spent four or less hours teaching business arrangements, renting, leasing, titles, and farm law. In no other area of the entire study did teachers use this reason more frequently. Only one teacher used over twenty hours on this unit.

Planning and organization, including budgets, and combinations of enterprises ranked seventh out of nine in regard to the total hours used

by the group. DeGraff commenting on the subject of organization and planning, particularly concerning organization of farm work stated:

"A good farmer knows, tonight, what he is going to do tomorrow and the day after, as well as next week. He knows, too, what he is going to do if it rains. You can explain many of the differences in the results obtained by successful and unsuccessful farmers by their differences in day-to-day work planning, thinking ahead, getting everything ready beforehand."³⁰

Eighty per cent of the teachers surveyed conceded that the time spent on planning and organization was insufficient. No teacher thought that the subject was unimportant to high school students even though thirty of them reported teaching no hours at all on the subject.

Federal agencies and policies was the most neglected subject included in this study in regard to the time devoted to its teaching by the forty vocational agriculture teachers in northwest Oklahoma. Only five teachers actually recorded any time spent on federal agencies and policies. Seventeen reported that they included some instruction on this unit under other enterprises and nine said that insufficient reference material kept them from using more time on the subject.

Twice as many teachers regarded the time spent on taxes and social security to be insufficient as there were those who thought that the time was adequate. Out of the 720 periods available to a vocational agriculture teacher, the ones included in this study devoted an average of slightly over five periods per teacher to instruction on taxes and social security. Lack of training of the teacher was the most commonly used reason for not spending more time.

³⁰H. DeGraff, L. Haystead, The Business of Farming (University of Oklahoma Press, 1951), p. 116.

According to the monthly reports submitted by the vocational agriculture teachers to the State Department of Vocational Agriculture at Stillwater, Oklahoma, no teacher considered marketing to be unimportant to high school students. Seventy-four per cent devoted between zero and four hours to teaching of this subject.

Exactly half of the teachers surveyed spent no time at all on economics, agricultural prices, and trends. Seventeen stated that they included some instruction on economics in the teaching of other farm subjects but nearly half of them thought that they were not giving adequate attention to the subject.

There was a wide variation in the time spent on credit, financing, and banking as revealed by the fact that two teachers spent over twenty-five hours while seventy-five per cent of them spent four or less periods to its teaching. A majority thought that the time spent was insufficient.

Records and record keeping was "head and shoulders" above all other phases of farm management, economics and marketing when rated from the standpoint of time spent on its teaching by forty vocational agriculture teachers in northwest Oklahoma. Every teacher recorded time spent on records in his monthly reports and the average time used was about thirty minutes per week. Even though time was universally spent on records, it is interesting to observe that the number of periods spent varied from a low of fifteen hours to a high of one hundred and eighty-five.

The average time used in the entire field of farm management, agriculture economics, and marketing by all the teachers included in this study was one hundred and twelve periods. This is about fifteen and one-half per cent of the time available to a teacher in a four year course of vocational agriculture in Oklahoma. The most commonly used reason for

not devoting more time to the field of agriculture economics, marketing and farm management was: Time allotted was sufficient to meet the needs of the students. Not important to high school students was the statement least used by the group for not spending more time.

Vocational agriculture teachers included in this study evidently have gained in their appreciation of the importance of farm management teaching in a nearly direct proportion to their years of experience in teaching vocational agriculture. Those who had between fifteen and nineteen years of experience averaged spending fifty per cent more time on farm management and related subjects than did those who had four or less years in the teaching field. This is no doubt the result of having visited many farms and having observed the increased amount of capital needed, larger size of businesses and their discussion with farmers about management procedures, rather than minor facets of farming.

It would not seem correct to attribute greater average student labor income to more time spent by vocational agriculture teachers on farm management instruction. However, there does seem to be a slight difference in favor of those where more time was devoted to farm management teaching.

Thirty-two units of farm management, agricultural economics and marketing were presented to vocational agriculture teachers in this study. The first ten ranked in the order of their importance by this group were: (1) Marketing livestock; (2) Efficient use of capital; (3) Records and analysis; (4) Credit; (5) Seasonal marketing; (6) Rates of livestock production; (7) Efficient use of labor; (8) Supply-demand relationships; (9) Marketing feeds and seeds; and (10) Rates of crop production. These teachers

considered the following units of least importance in the four year course of study: social security, making a budget, storage, farm organizations, marketing produce and processing.

Vocational agriculture instructors made use of many teaching aids, reference materials and resource personnel in their instructional programs in farm management, agricultural economics and marketing. In addition to such sources as books, magazines and charts, these teachers suggested of their own volition: films, successful farmers, insurance personnel and personal surveys.

CONCLUSIONS

Several logical conclusions can be drawn from an analysis of the farm management, agriculture economics and marketing teaching programs of forty vocational agriculture teachers in northwest Oklahoma. The author believes that the more important conclusions are:

1. The first tables in this study point out that farming, in the area under consideration, is big business and hence decision making in farm management might very well be one of the most, if not the most, important phase in the instruction program of vocational agriculture teachers.
2. The fact that so many teachers stated that the reason they did not spend more time on particular phases of farm management, economics and marketing was "Taught in other enterprises," leads the author to conclude that there is a widespread misunderstanding of just what constitutes instruction in this field.
3. There seems to be very little agreement among teachers concerning how much time to spend on agriculture economics, farm manage-

ment and marketing. One instructor devoted nearly ten times as many hours as another one in the same area.

4. It is believed that many vocational agriculture teachers in northwest Oklahoma do not devote more time to instruction in farm management, agriculture economics, and marketing because of a lack of confidence in their ability. This hypothesis is supported by the fact that: (a) experienced teachers spend more time on the area than do new instructors, and (b) there were thirty-six instances where teachers used the reason "teacher not sufficiently trained to teach more."

RECOMMENDATIONS

In order to strengthen the instructional program in farm management, agricultural economics and marketing in the vocational agriculture departments in Oklahoma, the author makes the following recommendations:

- (1) It is evident that there are wide variations in the amount and, very possibly, the quality of instruction in the various phases of the subject under consideration. The author recommends that each professional improvement group in the state of Oklahoma designate a meeting or meetings for the purpose of discussing farm management, agriculture economics and marketing. Teachers who are recognized as being competent in various phases of the area should present their methods and ideas.

- (2) It is further recommended that the agriculture education department continue to stress the importance of farm management, economics and marketing to prospective teachers. Efforts should be continued to find new and more effective ways to present the subject to high school students.

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APPENDIX

SURVEY FORM

Survey Number _____ Years teaching experience in Voc. Agri. _____

Number of boys in all day classes (1959-60) Farm _____ Non Farm _____ Total _____

Below is listed the number of hours in Farm Management, Marketing and Economics that you taught to your all day boys during the school year 1959-60 as indicated by your monthly reports for that period. (In some cases where Ag III and IV alternate, the year 1958-59 was used to get the alternate year). In column (1), indicate by checking 'yes' or 'no' whether or not you consider enough time was spent on each problem. In column (2) indicate the main reason that you did not spend more time in teaching in the area under consideration. Please answer each line even though no time is shown.

(Reasons are lettered A, B, C, etc. Use appropriate letter to indicate reason)

- A. Too few boys returning to the farm to justify more time.
- B. Insufficient reference material.
- C. Teacher not sufficiently trained to teach more.
- D. Unable to maintain interest of students.
- E. Not important to high school students.
- F. Time allotted was sufficient to meet needs of students.
- G. Do not have time.
- H. Other reasons.

	Ag. I	Ag. II	Ag. III	Ag. IV	1		2
					Yes	No	Reason
Farm Management (no designation)							
Business arrangement: Rent-leasing-titles-farm law.							
Planning and organization: Budgets-enterprise combination							
Federal agencies-policies							
Taxes-social security							
Marketing: livestock, crops, etc.							
Economics (Price cycles-trends)							
Credit-Financing-Banking							
Records and record keeping							

VITA

Clyde Merlin Triplett

Candidate for the Degree of

Master of Science

Thesis: AN ANALYSIS OF TEACHING PROGRAMS IN FARM MANAGEMENT, AGRICULTURE ECONOMICS, AND MARKETING IN FORTY VOCATIONAL AGRICULTURE DEPARTMENTS IN NORTHWEST OKLAHOMA

Biographical:

Personal data: Born at Kingfisher, Oklahoma, May 15, 1923, the son of Ernest and Gladys Triplett.

Education: Attended grade school at Victory grade school, Kingfisher County and Kingfisher grade school; graduated from Kingfisher High School in 1941; received the Bachelor of Science Degree from Oklahoma State University, with a major in Agricultural Education, in May, 1948. Attended Colorado State University and completed requirements for the Master of Science Degree in Agricultural Education at the Oklahoma State University in August, 1961.

Professional experience: Active duty in United States Air Corps in 1943-1946, First Lieutenant; Vocational Agriculture Teacher, Jet, Oklahoma, 1948-1952; Vocational Agriculture Teacher, Mooreland, from 1952 to present.

Organizations: Oklahoma Education Association; Oklahoma Vocational Association, and American Vocational Association