THESIS

A STUDY OF THE FACTORS AFFECTING THE SUPERVISED FARM TRAINING PROGRAMS OF VOCATIONAL AGRICULTURE STUDENTS OF THE SALT RIVER VALLEY OF ARIZONA

> Submitted by Owen W. Allen

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CHAPTER I

INTRODUCTION AND STATEMENT OF THE PROBLEM

The primary function of the work in vocational agriculture offered in high schools, under the provisions of the Smith-Hughes Act, is to give instruction and training that will prepare those taking the work to become efficient future farmers.

All effective vocational training in agriculture involves two distinct kinds of work. One, commonly called instruction, takes place in the classroom. The other, commonly called training, takes place on farms. The latter is supposed to give adequate practical farm experience in producing and in disposing of agricultural products. It is generally believed that one needs to learn how to perform farm jobs efficiently as well as to learn how they should be done.

Many people engaged in the field of vocational education in agriculture believe that the supervised farm training experiences make the course in vocational agriculture a real vocational course. They believe that when the practical farm experience is omitted the course is not a vocational course. These generalized statements indicate that the supervised farm training experience is very important in effective vocational education in agriculture.

The supervised farm training experience commonly engaged in by boys enrolled in vocational agriculture courses consists of supervised home project work and of the performance of supplementary farm training jobs not arising in the project work.

A good project in vocational agriculture involves the production and disposal of an agricultural commodity, such as corn, wheat, pork, or fruit. The boy is supposed to have the full managerial and operative responsibilities for the tasks involved.

The characteristic features of projects in vocational agriculture are:

"1. A definite undertaking of considerable scope by the student himself. This implies that a project is not a little job, nor a mere exercise, but a real, complex, and more or less definite undertaking, extending over a considerable period of time, and involving the production of an agricultural product such as milk, corn, pork, etc.

2. An undertaking entered upon wholeheartedly by the student.

3. A purposeful activity implying that the student has clearly visualized definite aims, objectives, or goals, which he wants to attain in conducting the undertaking.

4. A life-like undertaking, that is natural and resembling similar undertakings done out of school by men

engaged in the real work of life.

5. An educative activity. In the proper execution of the project the student will acquire the skills, habits, attitudes, appreciation, and knowledge which he would acquire if he followed some other means of learning."1

When a boy in school learns how to test seed corn and has no corn project at home, but does test his father's seed, he is engaged in a supplementary farm training job. The training experience supplements that received in the projects he may be conducting.

When the project work and the supplementary farm training jobs are organized in the form of a definite program, covering the period of training, then one has a supervised farm training program.

It is generally thought that the practical farm training experience a boy should get while in training should be outlined in a definite program.

The Federal Board for Vocational Education makes the following statement about supervised farm training programs: "The supervised practice program should be of such a scope and nature as will enable the pupil to secure practical experience in management, marketing, financing, farm accounting and manipulative skills. Supervised practice should include work with one or more of the major ¹Schmidt, G. A. Teaching Farm Shop Work and Farm Mechanics Through Pupil Projects. p. 2-3. enterprises in the farming occupation which the student expects to enter."2

The following outline illustrates a boy's long-time supervised farm training program. In it, however, the supplementary farm training jobs are outlined only for the first year's work.

One of the most common problems confronting the agricultural instructor is getting the boys started on good supervised farm training programs of sufficient scope to make the work practical, profitable, and hence interesting to the boys. The instructor wants to provide the boys with the types of practical training that will do them the most good as future farmers.

<u>Reasons for this Study</u>.-- Some boys have been much more successful or more able to carry out a desirable supervised farm training program than others, apparently without tangible reasons.

Undoubtedly there are a good many factors or elements that contribute to the formulation and execution of a good supervised farm training program. Then, too, the writer believes that there are some important factors that interfere or hinder the formulation and execution of a good supervised farm training program.

There is quite a difference in the methods and procedure used among the teachers of vocational agriculture Federal Board for Vocational Education, Supervised Practice in Agriculture Inculding home projects--Bul. No. 112 p. 6.

A Boy's Long-Time Supervised Farm Training Program Part I - The Project Program First Year Second Year Third Year Raising two dairy Two cows Two cows heifers 5 A. Sudan pasture Two calves Two heifers Two calves 5 A. Sudan past- 5 A. Sudan past -ure program Supplementary farm 10 A. Alfalfa training jobs not (See Part II) training jobs not included in the Supplementary project program farm training jobs not includ -ed in the project program Part II -- Supplementary Farm Training Jobs* In Connection with First Year Agriculture Poultry Production 1. Fitting animals for showroutry Production2. Showing beef animals1. Selecting pullets3. Dehorning steers2. Keeping records on home Beef Production 3. Dehorning steers flocks 4. Fattening steers for market 3. Feeding chicks 4. Feeding the home flock 5. Providing pasture 5. Culling the home flock 6. Etc. 6. Etc. Wheat Production Corn Production 1. Selecting best variety for home crop 1. Treating seed for smut 2. Grading wheat 2. Selecting seed in field 3. Buving seed corn 2. Selecting good seed 4. Selecting variety for 4. Det. place of crop in home home farm 5. Etc. rotation system 5. Etc. *Very incomplete and merely suggestive of the kind of supplementary farm training which would correlate with the instruction.

in establishing the boys in their supervised farm training programs, thus bringing other factors into play.

It is hoped by the writer that by making a study of the contributing and hindering factors of the supervised farm training programs of vocational agriculture students that the teachers, parents, and students may see more clearly:

- The relationship between certain contributing factors and good or superior supervised farm training programs,
- The relationship between certain hindering factors and poor or unsatisfactory supervised farm training programs.

It is because of these reasons that the writer undertook the study of the problem involved in this thesis.

The Problem.-- The problem involved in this study was to determine the factors influencing the type of supervised farm training programs carried by boys who are now taking and have taken vocational agriculture in the high schools of the Salt River Valley of Arizona.

<u>The Allocation of this Study</u>.-- This study is based on the supervised farm training programs of the boys in the vocational agriculture departments of the ten high schools located in the Salt River Valley of Arizona.

This valley is located in the south central part of Arizona, with Phoenix, the state capital, as the central point. The irrigated section is approximately eighty miles long and thirty to forty miles wide. The Roosevelt Dam, a great engineering feat, impounds water for the irrigation of the fertile Salt River Valley. This valley is intensely cultivated, and has a sub-tropical climate. The major crops are alfalfa, cotton, small grains, grain sorghums, winter truck crops, citrus fruits, dates, and many other fruits. The livestock enterprises consist of the winter feeding of beef cattle and sheep, of dairying and of poultry raising. The farms in the valley range in size from 10 to 1400 acres, averaging about 60 acres per farm.

The following ten schools located in this valley were considered in this study: Gilbert High School Mesa Union High School Chandler High School Tolleson High School Litchfield High School Tempe High School Phoenix Union High School Buckeye High School Glendale High School Peoria High School

All the above schools, with the exceptions of Phoenix Union High School and Mesa Union High School, are located in small towns of from one to five thousand population, and are supported mostly by agriculture. The majority of the students in eight of these high schools come from the

farms. Phoenix Union High School and Mesa Union High School are the only city schools included in this study, and since they draw many students from farms they therefore offer a course in vocational agriculture.

CHAPTER II METHODS OF ATTACKING THE PROBLEM

In conducting this study one of the first problems arising was the selection of the factors that might contribute to or hinder good supervised farm training programs. From the writer's background of experience, covering fourteen years of work as teacher of vocational agriculture, and from a study of books and bulletins on vocational agriculture he listed factors which he considered may contribute to or hinder a good training program in agriculture. As a result of this analysis, thirty-six factors were established. These are listed in Table I.

The next step in the procedure was to submit this list of factors to the vocational agriculture teachers of the Salt River Valley for criticism; this was done at a regular monthly meeting. The teachers were asked to criticize the list. They were asked to check any factor that they thought in no way affected a boys supervised farm training program. These teachers made absolutely no changes in the original list. They were, also, asked to add to the list any factor they thought influenced the supervised, farm training programs, but none were added.

The list of thirty-six factors was also submitted to the vocational agriculture students of the Glendale High

School where the writer teaches, and was discussed with the boys in his classes. They, too, made no changes or additions.

<u>How the Data were Collected</u>.-- Two kinds of questionnaires, including the thirty-six factors to be used in this study, were prepared. One of these questionnaires was prepared for all the students in vocational agriculture in the ten high schools of the Salt River Valley; the other was prepared for all teachers of vocational agriculture in the valley.³

The student's questionnaire consisted of three parts. Part I was a series of questions regarding the boy's home life, parental attitudes, and farming conditions. Part II consisted of a blank form on which the boy could outline his supervised farm training program. Also, questions were asked which would give some important facts connected with the boy's program. Some of these questions are:

Who financed your supervised farm training program?

Do you get the returns from your project work? Do you keep accurate records on your projects? Do you study project jobs in class?

Does your teacher give your project close supervision?

In Part III the students were asked to look over the prepared list of thirty-six factors, and to check (\checkmark) each factor that had definitely helped or hindered them in $\frac{1}{2}$ Copies of these questionnaires are found in the appendix.

Table I.-- List of the Thirty-six Factors influencing Supervised Farm Training Programs in Vocational Agriculture 1. Living on farm 2. Raised on farm 3. Living in town 4. Raised in town 5. Farm too small 6. Large farm 7. Attitude of father 8. Attitude of mother 9. Widowed mother 10. Parents divorced 11. Living away from home 12. Parents gave boy his project 13. Parents financed boy's project 14. Parents could not finance boy's project 15. Borrowed money to finance project 16. Lack of finances 17. Started project on a paying basis 18. Started project too small 19. Teacher's personal interest 20. Teacher's project supervision 21. Studied project jobs in class 22. Class work 23. Planned jobs in class 24. Kept accurate records 25. Handled own project returns 26. Had full responsibility of project 27. Parents retained ownership of project 28. Parents retained project returns 29. Did own project work 30. Showed at fairs 31. 4-H Club membership 32. F. F. A. activities 33. Desire for project credit 34. Desire to be State Farmer 35. Love for farming 36. Written agreement their supervised farm training work. The questionnaires for the students were taken per-

sonally to the teachers of vocational agriculture in nine

of the schools. Each teacher was asked to have the questionnaires filled out by the boys in the classroom so that any assistance necessary could be given them. There were 216 student questionnaires returned including those from the boys in the writer's own school. Eleven questionnaires were eliminated from the list because of incomplete information, thus leaving 205 student questionnaires which were used in this study.

The teacher's questionnaire consisted of the same list of factors as in Part III of the student's questionnaire. The teachers were asked to rate each factor from one to ten as to whether, in their opinion, it helped or hindered the boy in his supervised farm training program and to what degree. The teachers were asked to make their rating on the basis of ten points for the factors that they considered very important, five points for those that they considered of average importance, and one for those that they considered of little or of no importance.

The next step in making this study was to set up the elements characterizing superior, standard, and unsatisfactory supervised farm training programs. Here again the writer had to fall back on his own background of experience as a teacher of vocational agriculture. He listed what he thought were the important elements characterizing each, superior, standard, and unsatisfactory

of these three classes of training programs. He had an opportunity to confer with Professor L.D. Klemmedson, Professor of Agricultural Education of the University of Arizona, about these three classes of programs. As a result of this conference the writer outlined the characteristic features of each of these classes as described in the material which follows.

Superior Supervised Farm Training Programs

The superior supervised farm training programs are those that are outstanding in one or more phases and provide real farm training situations. The characteristics of this group are:

- 1. The program is definitely planned.
- 2. The program is managed by the boy.
- 3. The boy has full ownership of the program.
- 4. One or more enterprises are developed to a comparatively large scope, nearing real farm training experiences for the boy, and furnish regular and systematic training.

The following illustration is an actual case representing the superior group:

Enterprise	Pro	Projects		
	First Year	Second Year		
Milk production	5 cows 5 calves	6 cows 8 heifers 4 calves		
Pork production		l sow		
Poultry	60 chicks	295 chicks		
Small grains	3 acres	8 acres		

The characteristics of the standard supervised farm training programs are as follows:

- 1. The boy must have a definitely planned program in operation.
- 2. The program may or may not be managed by the boy.
- 3. The boy may or may not have full ownership.
- 4. It may consist of one or more enterprises developed to a moderate extent, furnishing regular and systematic training which is usually not veried.

The following illustration is an actual case which represents the standard group:

Enterprise	Projects		
Milk production	First Year 1 cow	Second Year 2 heifers	
Pork production	l brood sow 9 pigs		
Poultry		200 baby chicks	

<u>Unsatisfactory Supervised Farm Training Programs</u> The characteristic features of the unsatisfactory supervised farm training programs are as follows:

- 1. The boy may or may not have a definitely planned program.
- 2. The boy may or may not have full management of the program.
- 3. The boy may or may not have full ownership of the program.

4. The scope is generally very small.

5. Some may be keeping records on crops or livestock enterprises for their parents, but receive no share in the returns.

The following illustration is an actual case representing the unsatisfactory group:

Enterprise		Projec	ts			
Poultry	1	2 50 chicks		3		4
Bees			5	stands		
Garden	1/2 acre					
Keeping records on home herd					5	cows

The next step in undertaking this study was to group the factors and other facts acquired through the questionnaire used in this study into five groups, namely:

1. Home conditions. 3. School conditions.

2. Farming conditions. 4. Parents attitudes.

5. Boys attitudes.

This grouping of factors was done because the writer felt that the five divisions represented the important conditions and attitudes influencing supervised farm training programs. These groupings are shown in Table II.

TABLE II

A LIST OF THE THIRTY-SIX FACTORS GIVEN IN TABLE I AND OTHER FACTS ACQUIRED THROUGH THE QUESTIONNAIRE USED IN THIS STUDY, GROUPED INTO FIVE DIVISIONS. D. Parent's attitude-A. Home conditions-1. Living with parents. 1. Parents favor education. 2. Parents favor farming as 2. Size of family. 3. Occupation of father. an occupation. 3. Parents favor a strong 4. Financial status of family. project program. 4. Boy owns project. 5. Parents could not finance project. 5. Boy gets project returns 6. Lack of finances. 6. Boy manages own project. 7. Widowed mother. 7. Parents helped finance 8. Parents divorced. boy's project. 9. Living away from home. 8. Parents gave boy project. 10. Education of parents. 9. Parents were the incentive for project. 10. Parents kept project B. Farming conditions-1. Lives on farm. returns. 2. Raised on farm. 11. Parents and boy have 3. Lives in town. written agreement. 4. Raised in town. 12. Helpful attitude of father. 5. Large farm--160 acres and over. 13. Helpful attitude of 6. Farm too small--less mother. than 20 acres. E. Boy's attitude-7. Parents experienced Boy is going to college.
 Boy is going to farm. in farming. 8. Average size of farm. 3. Farming occupation is first choice. C. School conditions-4. Boy does own work. 1. Teacher gives ample 5. Boy pays cost of project. supervision. 2. Teacher's personal 6. Boy manages own project. interest. 7. Boy helped finance pro-3. Studied project jobs ject with own savings. 8. Boy used personal loan. in class. 9. Boy was the incentive. 4. Planned project jobs 10. Boy keeps accurate in class. 5. Studied record keeprecords. 11. Boy likes farming. ing in class. 12. Boy wants to be State 6. Checked project records in class. F. F. A. Farmer. 7. Class work. 13. Boy started project on 8. F. F. A. activities. paying basis. 9. Was 4-H Club member. 14. Boy started project 10. Showed at fairs. too small. 11. Teacher was the in-15. Desire for project centive for project. credit.

CHAPTER III

REVIEW OF LITERATURE

The writer was unable to discover any study pertaining to factors that contribute to or hinder supervised farm training work of boys enrolled in vocational agriculture classes.

However, much has been written about the importance of supervised farm training experiences of boys enrolled in vocational agriculture classes, about projects, and about supplementary farm training jobs. This review of literature therefore is more or less general.

Undoubtedly, the very great importance of supervised farm training experiences for future farmers is made clear by the following:

Prosser and Allen in their book entitled "Vocational Education in a Democracy" say:- "All effective vocational education requires training in doing and in thinking about doing. Practice in doing anything is needed to explain and fix theory, while theory is necessary to guide and improve skill.----- The more intimately and closely theory (knowledge) and practice (skill) can be related, the more effective will be the training in each, and the more resourceful will be the job intelligence developed in the student and worker.---- If you want to train a farm boy to become a successful dairyman, you must have him take care of cows as they should be handled, while at the same time you teach him the functioning facts he needs to know and use in his work."⁴

The Smith-Hughes Act in Section 10 states:- The purpose of vocational education in agriculture "Shall be to fit for useful farm employment; shall be of less than college grade and be designed to meet the needs of persons over fourteen years of age who have entered on or who are preparing to enter upon the work of the farm or of the farm home;------ that such schools (schools offering instruction in vocational agriculture) shall provide for directed or supervised practice in agriculture, either on a farm provided by the school or other farm, for at least six months per year."5

Professor H. E. Lattig states:- "No teacher will put over a real program in vocational agriculture and have its effects remain in the community, unless his boys have the right kinds of supervised farm practice work.-----If the vocational program in agriculture is to grow and expand, every possible improvement of the project work should be considered.----- If the work of the teacher, in schools where poor projects exist, were examined carefully, it would possibly be found that the parents of the "Prosser and Allen--"Vocational Education in a Democracy". p. 275-6. 5Smith Hughes Act (Public No. 347--64th Congress) (S703)

boys had not a thorough knowledge of what the teachers were attempting to put over."⁶

Professor Lattig in his book "Practical Methods in Teaching Vocational Agriculture", has devoted the second chapter to the selection of projects by boys enrolled in vocational agriculture classes. In this chapter he discusses many points that need to be considered if boys are to have good projects. He mentioned a few of the factors which the writer has discussed in this thesis.

G. A. Schmidt in "New Methods in Teaching Vocational Agriculture" writes as follows :- "The typical farmer is both an operator and a manager; that is, he does the work and he assumes the full managerial responsibility of the work. An efficient farm manager, as every successful former must be, can no more be trained efficiently in a class room, than can the locomotive engineer that runs the best Surely no one would care to ride in a passenger train. train piloted by an engineer just out of the school room. Of course many facts that a good farm manager needs to know may efficiently be acquired in the classroom but managerial ability cannot be taught. It must be acquired on the job, through management experience. The passenger train engineer starts as a fireman; then he becomes an engineer on a local freight or on a switch engine. If he develops good job intelligence, he will be promoted to the

^DLattig, H.E. -- "Insuring Worth While Projects in Vocational Agriculture by Securing Cooperation of Parents".-U. of Idaho.

fast freight; then to the local passenger train and finally, if successful in all these jobs, with gradually increasing responsibilities, he will become the engineer of the limited passenger train.

Just such a gradual training as that of the engineer in the development of increased management responsibilities is needed in project work."7

G. A. Schmidt, in his book pertaining to project work has several chapters in this which touch upon some of the phases of project work discussed in this thesis. The chapter on "Project Values" shows the important training values of project work. The chapter on "Selection of Projects" indicates many things that a boy needs to consider in start ing out on a supervised farm training program.⁸

Z. M. Smith devotes a chapter in his book to supervised farm practice work. In this chapter he discusses various aspects of project work, and touches upon factors influencing the project work of the boys enrolled in vocational agriculture classes.⁹

G. C. Cook says:- "The supervised farm practice work should be so presented that the student will realize its many advantages, and that because of this realization he he will want to have not one project which he will drop at the end of the year and select another for the next year. 'Schmidt G. A. - "New Methods in Teaching Vocational Agriculture" -p. 156-7. 8Schmidt, G. A. - "Projects and the Project Method in Vocational Agriculture". 9Smith, Z. M.-"The Work of the Teacher of Vocational Agriculture".

but rather that his projects will continue each year growing into a supervised practice program." Cook discusses in his book many phases of supervised farm training work.¹⁰

The Federal Board for Vocational Education has issued the following bulletins on project work:

1. Supervised Practice in Agriculture.--Bulletin 83.

- Supervised Practice in Agriculture--Including Home Projects--Bulletin 112.
- 3. Agricultural Project Planning.--Bulletin 117.
- 4. The Home Project. -- Bulletin 71.
- 5. Training Teachers in Supervised Farm Practice Methods.--Bulletin 165.

All the above publications pertaining specifically to supervised farm training experience mention many of the factors used in this study.

10Cook, Glen Charles - "Handbook on Teaching Vocational Agriculture" p. 155.

CHAPTER IV

FACTORS CONTRIBUTING FAVORABLY TO SUPERVISED FARM TRAINING PROGRAMS

As mentioned in Chapter II, there were ten teachers of vocational agriculture in the Salt River Valley of Arizona. The writer was and is one of these ten teachers. Each teacher was supplied with a questionnaire containing a list of thirty-six factors that might in some way contribute to a boy's supervised farm training program in vocational agriculture. The teachers were asked to check the factors which helped or contributed favorably to good supervised farm practice work.

Table III shows the results of the checking by the teachers. This table shows that all of the teachers, or 100 per cent of them checked fourteen of these factors. The table further shows that nine teachers checked six other factors, eight teachers checked two more of the factors, and seven checked two others. Thus, twentyfour of the factors were checked by at least 70 per cent or more of the teachers.

The teachers were also asked to make a comparative evaluation of the factors that they had checked as contributing favorably to supervised farm training programs. They were asked to rate each factor from one to ten,

Table III .- List of Factors that the Teachers Think Contribute to the Supervised Farm Training Programs. Number Factors Checked % Checked 1. Living on farm 10 100. 2. Attitude of mother 10 100. 10 3. Started project on paying basis 100. 4. Teacher's personal interest 10 100. 5. Teacher's project supervision 10 100. 6. Studied project jobs in class 10 100. 10 100. 7. Class work 8. Planned project jobs in class 10 100. 9. Kept accurate records 10 100. 10. Handles own returns 10 100. 11. Had full responsibility of project 10 100. 10 100. 12. Did own project work 10 100. 13. F. F. A. activities 14. Love for farming 10 100. 9 15. Attitude of father 90. 16. Parents financed boy's project 9 90. 9999887754 17. Borrowed money 90. 18. Showed at fairs 90. 19. Deaire for project credit 90. 20. Desire to be State F. F. A. Farmer 90. 21. Raised on farm 80. 80. 22. Large farm 70. 23. Parents gave boy his project 24. 4 - H Club 70. 25. Written agreement 50. 26. Widowed mother 40. 27. Parents could not finance boy's 4 project 40. · 322 28. Farm too small 30. 29. Parents divorced 20. 30. Living away from home 20. 2 20. 31. Started project too small 1 32. Lack of finances 10. 0 33. Living in town 0 0 0 34. Raised in town 35. Parents retained ownership of project 0 0 0 36. Parents retained project returns 0

according to the importance of the factor. If they considered a factor very important they were to rate it ten, five for those they considered of average importance, and one for those of little importance. These ratings or evaluations were summed up for each factor and the results are shown in Table IV. Since there were ten teachers, the maximum score for each factor would be 100.

Table IV shows that five of the contributing factors were evaluated above 90 by the teachers; one hundred (100) being the maximum rating. The table further shows that six more of the factors were evaluated 80 or above, and that six others were evaluated 65 or above. Thus, seventeen of the thirty-six factors were evaluated 65 or above.

As was mentioned in Chapter II. 205 boys returned questionnaires. In Part III of this questionnaire was the same list of thirty-six factors that the teachers were asked to check. The boys were asked to check (\checkmark) each factor that they felt had definitely and favorably contributed to their supervised farm training programs. In Table V are given the results of the checking done by the students.

Table V shows that 103 boys, or 50.2 per cent of the group, checked seventeen of the factors, thus showing

Table IV .- The Comparative Evaluations by the Teachers of the Factors Contributing to the Supervised Farm Training Programs. Comparative importance of factors - maximum Contributing Factors score is 100 1. Living on farm 95 2. Had full responsibility of project 94 91 3. Teacher's supervision 91 4. Handled own returns 5. Teacher's personal interest 91 87 6. Kept accurate records 7. Attitude of mother 86 85 8. Did own project work 9. Studied project jobs in class 85 10. Attitude of father 84 80 11. F. F. A. activities 12. Started project on paying basis 78 78 13. Class work 14. Love for farming 77 15. Planned jobs in class 76 69 16. Parents financed project 65 17. Borrowed money 64 18. Desire for project credit 55 54 52 19. Raised on farm 20. Desire to be State Farmer 21. Showed at fairs 51 22. Large farm 43 23. 4-H Club membership 24. Parents gave boy his project 37 30 25. Written agreement 24 26. Widowed mother 18 27. Parents could not finance boy's project 14 28. Living away from home 29. Farm too small 14 6 30. Started too small 31. Parents divorced 2 32. Lack of finances 0 33. Parents kept returns 0 34. Parents retained ownership of project 0 35. Raised in town 36. Living in town 0

Table V Outstanding Contribu	ating Factor	rs of 205
boys' Supervised Farm Training Prog	grams.	
Factors	o. of boys Checked	% of boys Checked
 Studied project jobs in class Living on farm Attitude of mother Raised on farm Attitude of father Did own project work F. F. A. activities Had full responsibility of 	153 152 147 147 146 141 138	75.6 74.1 71.7 71.7 71.2 68.7 67.3
project 9. Kept accurate records 10. Class work 11. Teacher's personal interest 12. Desire for project credit 13. Teacher's project supervision 14. Planned jobs in class 15. Love for farming 16. Desire to be a State Farmer 17. Handled own project returns 18. Parents financed boy's project 19. Large farm 20. Parents gave boy his project 21. Started project on paying basis 22. Showed at fairs 23. 4-H Club membership 24. Written agreement 25. Borrowed money to finance project 26. Parents could not finance project 27. Parents retained ownership of	138 138 137 134 126 122 122 122 118 106 103 78 71 62 58 71 62 58 53 46 53 46 ect 29	67.3 67.3 66.8 65.3 61.4 59.5 57.5 57.5 57.5 51.7 50.2 38.0 34.6 30.2 28.2 25.8 22.4 18.5 14.1
27. Farents retained ownership of project 28. Living in town 29. Raised in town 30. Started project too small 31. Living away from home 32. Parents retained project return 33. Farm too small 34. Parents divorced 35. Lack of finances 36. Widowed mother	2 14 9 6 6 6 18 6 5 1 1 0	6.8 4.3 2.9 2.9 2.9 2.9 2.9 2.4 .4 .4

that these factors contributed most to the success of
their supervised farm training programs. The ten
factors most frequently checked were:
1. Studied project jobs in 6. Did own project work. class.
2. Living on farm.
3. Attitude of mother
4. Raised on farm.
5. Attitude of father.
10. Class work.

Table VI shows a comparison of the checking factors done by the **teachers** and students. The table further shows that the first fifteen factors as checked by the students and the teachers agree almost entirely. There are only two exceptions. They are: Started project on a paying basis and Handled own project returns. The sixteenth, seventeenth, and eighteenth factors were checked lower comparatively by the students than by the They are: Parents financed boy's project, teachers. Borrowed money to finance project, and Showed at fairs. All other factors agree quite generally according to the checkings in their importance in contributing to the supervised farm training programs.

There were fourteen factors checked by ten teachers or 100 per cent, while the highest checking by the pupils was 75.6 per cent. Thus the pupils' checkings were considerably lower than the teachers'.

Table VI .- A Comparison of the Checking on the Contributing Factors by the Teachers and Students. Teachers Students Contributing Factors checked % checked % 100. 1. Studied project jobs in class 75.6 74.1 2. Living on Farm 100. 3. Attitude of mother 100. 71.7 100. 68.7 4. Did own project work 100. 67.3 5. F. F. A. activities 30.2 100. 6. Started project on paying basis 7. Teacher's personal interest 100. 65.3 59.5 66.8 8. Teacher's project supervision 100. 100. 9. Class work 100. **59.**5 10. Planned project jobs in class 67.3 100. 11. Kept accurate records 50.2 12. Handled own project returns 100. 13. Had full responsibility of project100. 67.3 100. 57.5 14. Love for farming 71.2 15. Attitude of father 90. 16. Parents financed boy's project 90. 38.0 17. Borrowed money to finance project 90. 18.5 18. Showed at fairs 90. 28.2 19. Desire for project credit 90. 61.4 90. 51.7 20. Desire to be State Farmer 80. 71.7 21. Baised on a farm 80. 34.6 22. Large farm 23. Parents gave boy his project 70. 30.2 70. 25.8 24. 4-H Club membership 25. Written a greement 22.4 50. 40. 0.0 26. Widowed mother 27. Parents could not finance boy's 40. 14.1 project 28. Farm too small 30. 0.4 29. Parents divorced 20. 0.4 30. Living away from home 20. 2.9 31. Started project too small 20. 2.9 0.4 32. Lack of finances 10. 33. Living in town 34. Raised in town Ο. 4.3 Ο. 2.9 35. Parents retained ownership of project 0. 36. Parents retained project returns 0. 6.8 2.9

CHAPTER V

FACTORS HINDERING THE SUPERVISED FARM TRAINING PROGRAMS

The preceding chapter discussed the factors that contributed to the supervised farm training programs. This chapter will deal with the factors that hinder these programs.

As was mentioned in Chapter II, ten teachers of vocational agriculture in the Salt River Valley or Arizona, including the writer, were supplied with a questionnaire containing a list of thirty-six factors that may in some way hinder the supervised farm training programs of vocational agriculture students. The teachers were asked to check (\checkmark) the factors that they considered may hinder good supervised farm practice work.

Table VII shows the results of this check made by the teachers. The number of teachers and the percentage of the teachers that checked the factors that they considered were hindering good supervised farm training programs, are recorded.

Table VII shows that the factor <u>Living in town</u> was checked by all of the teachers as a hindering factor. This was the only factor that was considered as hindering by 100 per cent of the teachers. The next three factors Lack of finance, <u>Parents retained ownership of project</u>,
Table VII .- List the factors that the Teachers think Hinder the Supervised Farm Training Programs. Number Factors Checked % Checked 10 100. 1. Living in town 2. Lack of finances 90. 9 3. Parents retain ownership of 9 90. project 4. Living away from home 98888774 90. 5. Raised in town 80. 6. Parents divorced 80. 80. 7. Started project too small 80. 8. Parents retained project returns 9. Farm too small 70. 10. Parents could not finance project 70. 11. Widowed mother 40. NNNNN 12. Borrowed money to finance project 30. 13. Attitude of father 20. 14. Attitude of mother 20. 15. Parents gave boy his project 20. 20. 16. 4-H Club membership 1 10. 17. Large farm 18. Parents financed boy's project 1 10. 1 10. 19. Written agreement 0 20. Did own project work 0. 21. Teacher's personal interest 0 0. 22. Teacher's project supervision 0 0. 0 23. Studied project jobs in class Ο. 0 0. 24. Class work 0 25. Planned jobs in class 0. 0 0. 26. Kept accurate records 0 0. 27. Handled own returns 28. Had full responsibility of project 0 0. 0 29. Started project on paying basis 0. 0 30. Living on farm Ο. 0 31. Raised on farm 0. 0 32. Showed at fairs 0. 0 0. 33. F. F. A. activities 34. Desire for project credit 0 0. 35. Desire to be State Farmer 0 0. 0 0. 36. Love for farming

and Living away from home, were checked by nine teachers, or ninety per cent of them, as hindering to the supervised farm training programs. The fifth to the tenth factors, inclusive, were checked as hindering by from 70 to 80 per cent of the teachers. Thus, the first ten factors listed are considered by the teachers as important hindering factors. The other factors listed, according to the check made by the teachers, are of minor importance.

The teachers were also asked to make a comparative evaluation of the factors that they had checked as hindering to supervised farm training programs. They were asked to rate each factor from one to ten according to the importance of the factor as a hindering factor to the supervised farm training programs. If the factors were considered very important, they were to rate them ten, five for those they considered of average importance, and one for those of little importance as hindering to the supervised farm training programs. These evaluations were summed up for each factor, and the results are shown in Table VIII. Since there were ten teachers, the maximum score for each factor would be 100.

Table VIII shows that the factor <u>Living in town</u> is rated by the teachers as the greatest hindering factor to

Table VIII The Comparative Evaluation by the						
Teachers, of the Factors that Hinder the Supervised						
Farm Training Programs.						
Hindering Factors Comparative importance maximum score is 100						
1. Living in town652. Farents retain project ownership543. Farents retain project returns504. Lack of finances485. Farents divoreed466. Raised in town417. Farm too small408. Living away from home369. Started project too small3510. Farents could not finance boy'sproject11. Widowed mother2512. Attitude of mother1913. Attitude of father1614. Farents gave boy project1515. Borrowed money to finance project1516. Large farm77. 4-H Club membership518. Farents financed boy's project419. Written agreement120. Did own project yobs in class021. Teacher's personal interest022. Teacher's project supervision023. Studied project jobs in class024. Class work025. Flanned jobs in class026. Kept accurate records027. Handled own project returns028. Had full responsibility of project029. Started project on paying basis030. Living on farm031. Raised on farm032. Showed at fairs033. F. F. A. activities034. Desire to be State Farmer035. Love for farming0						

the supervised farm training programs. This factor was rated 65 by the teachers. This table also shows that the next six factors are important hindering factors, being rated from 40 to 54 by the teachers. They are as follows:

1. Parents retain project ownership

2. Parents retain project returns

3. Lack of finances

4. Parents divorced

5. Raised in town

6. Farm too small

The next three factors were rated from 29 to 36, showing that they are considered as fairly important in hindering the programs of the boys. Thus, there are about ten important hindering factors to the supervised farm training programs as rated by the teachers.

As was mentioned in Chapter II, there were 205 questionnaires, checked by the boys and returned. In Part III of this questionnaire there was the same list of the thirty-six factors that the teachers were asked to check. The boys were asked to check (\checkmark) each factor that they felt had definitely hindered their programs. In Table IX are given the results of the checking done by the students.

Table IX.- Outstanding Hindering Factors of 205 Boys' Supervised Farm Training Programs. No. of boys % of boys Hindering Factors checked checked 1. Living in town 70 34.1 2. Lack of finances 67 32.6 32.5 3. Started project too small 66 4. Farm too small 28.7 59 29 5. Raised in town 14.1 6. Parents could not finance boy's 21 10.2 project 7. Parents retained project returns 14 6.8 12 8. Living away from home 5.8 12 5.8 9. Attitude of father 10. Parents retained project 10 4.8 ownership 11. Attitude of mother 8 3.8 7 12. Parents divorced 3.3 2.4 13. Widowed mother 5 14. Borrowed money to finance 4 1.9 project 2 •9 15. 4-H Club membership .9.9.9 2 16. Parents gave boy project 2 17. Large farm 18. Parents financed boy's project 2 2 19. Kept accurate records 2 .9 20. Handled own project returns 21. Had full responsibility of •9 •9 project 2 2 22. Showed at fairs •9 •4 23. Planned jobs in class 2 1 24. Written agreement •4 •4 1 25. Class work 26. Did own project work 1 .4 1 27. F. F. A. activities •4 1 20. Desire for project credit 1 29. Started project on paying basis 1 28. Desire for project credit .4 30. Teacher's personal interest 0 .0 31. Teacher's project supervision032. Studied project jobs in class0 .0 .0 33. Living on farm 0 .0 34. Raised on farm 0 .0 0 35. Desire to be State Farmer .0 36. Love for farming 0 .0

Table IX shows that the outstanding hindering factors, as checked by the boys are:

1. Living in town

2. Lack of finances

3. Started project too small

4. Farm too small

These factors were checked as hindering from 28 to 34 per cent of the boys' supervised farm training programs

The following factors are fairly important as hindering factors:

1. Raised in town

2. Parents could not finance boy's project

3. Parents retained project returns

Thus, the first seven factors listed are considered by the boys to be the outstanding hindering factors to their supervised farm training programs.

The writer believes that a comparison of the more important hindering factors as checked by the students and the teachers in the preceding tables may more definitely establish the status of these factors. Table X shows this comparison in terms of per cent. It may be seen from this table that the teachers and the students agree on the first two hindering factors, which are:

1. Living in town

2. Lack of finances

Table X.- A Comparison of the Hindering Factors as Checked by the Teachers and Students, Shown in Terms of Per Cent.

	Hindering Factors	% of teachers checked	% of students checked
1.	Living in town	100.	34.1
2.	Lack of finances	90.	32.6
3.	Parents retained	90.	4.8
4.	Living away from home	90.	5.8
5.	Raised in town	80.	14.1
6.	Parents divorced	80.	3.3
7.	Started project too small	11 80.	32.5
8.	Parents retained project	t	
-	return	s 80 •	6.8
.9.	Farm too small	70 •	28.7
10.	Parents could not finan	ce To	30.0
	poy's project	70.	10.2
11.	Removed mother	40.	2.4
12.	Borrowed money to IInan	30	1 0
זא	Attitude of fether	20	5 8
14.	Attitude of mother	20	4.8
15.	Parents gave boy his pro	piect 20.	.9
16.	4-H Club membership	20.	.9
17.	Large farm	10.	.9
18.	Parents financed boy's		
	proje	ect 10.	•9
19.	Written agreement	10.	•4
20.	Did own project work	0.	• 4
21.	Teacher's personal inter	rest 0.	.0
22.	Teacher's project super	vision 0.	.0
23.	Studied project jobs in	class 0.	•0
24.	Class work	0.	•4
25.	Planned jobs in class	0.	•9
20.	Nept accurate records	. U.	•9
20	Handfed own project ret	of	•9
20.	nad full responsibility	0.	.0
20	Started project on pavin	ησ. 	• 7
-9.	basis	s 0.	• 4
30.	Living on farm	0.	.0
31.	Raised on farm	0.	.0
32.	Showed at fairs	0.	•9
33.	F. F. A. activities	0.	• 4
34.	Desire for project cred!	it 0.	•4
35.	Desire to be State Farme	er 0.	•0
36.	Love for farming	0.	•0

Two other factors <u>Started project too small</u>, and <u>Farm too small</u> were checked by both teachers and students as important factors that hinder the boys' supervised farm training programs.

This table further shows that six of the factors that were checked by 70 to 90 per cent of the teachers as important hindering factors really affected the students to a small degree, or 3 to 14 per cent. These factors are:

1.	Parents retain project ownership	4.	Parents retained project returns
2.	Living away from home	5.	Parents could not finance project
3.	Parents divorced	6.	Raised in town

The teachers and boys seem to agree on the majority of the hindering factors affecting the boys' supervised farm training programs.

CHAPTER VI

ANALYSIS OF 205 SUPERVISED FARM TRAINING PROGRAMS OF VOCATIONAL AGRICULTURE STUDENTS

As mentioned in Chapter II, 205 questionnaires, returned by the boys enrolled in vocational agriculture classes of the Salt River Valley of Arizona, were used in this study.

On these questionnaires was a blank form for each boy to record in outline form the supervised farm training program in which he was engaged. This chapter presents an analysis of these 205 supervised farm training programs.

One of the first steps taken in analyzing the questionnaires was to separate the training programs of the boys into three classes.

These three classes were fully described in Chapter II. A brief description of them is here repeated. Class I.-- Superior supervised farm training programs.

A. The program is definitely planned and in operation.

- B. The program is managed by the boy.
- C. The boy has full ownership of the program.
- D. One or more enterprises are developed to a comparatively large scope, giving real farm training experience to the boy, and furnishing regular and systematic training.



Unsatisfactory -- 70

Following the grouping of these supervised farm training programs, the writer made a study of each program in each class.

<u>The Superior Class</u>.-- From the boys' questionnaires the writer obtained the checking the boys made on the factors that contributed to or hindered their programs.

Table XI shows the results of the checking done on the contributing factors by the thirty boys whose programs were classified as <u>Superior</u>.

Fifteen, or 50 per cent of the boys, stated that eighteen of the thirty-six factors contributed toward the success of their programs. Less than 50 per cent of the boys stated that most of the remaining eighteen factors made some contribution to their success. The number of factors checked decreased rather rapidly after the eighteenth factor.

This table further shows that two factors contributed to the <u>superior</u> supervised farm training programs 100 per cent.

These factors are:

1. Had full responsibility of the project

2. Handled own project returns.

Three other factors that contributed to at least 90 per cent of the <u>superior</u> supervised farm training

Table XI Outstanding Contributing Fa	ctors o	f the
Boys who are Enrolled in Vocational Agricul	ture	rty
Factors	Həl No.	.ped %
 Had full responsibility of project Handled own returns Did own project work Attitude of mother Living on farm Kept accurate records F. F. A. activities Studied project jobs in class Class work Attitude of father Teacher's personal interest Raised on farm Planned project jobs in class Hande project jobs in class Planned project jobs in class Love for farming Desire to be state farmer Teacher's project supervision Desire for project credit Started project on paying basis Large farm Parents financed project Parents gave boy project Showed at fairs Holub membership Borrowed money Written agreement Living in town Parents divorced Parents retained project returns Widowed mother Yatset in too small Started project too small Eacher Started project returns 	30987555 543521100 5432096422221000000	100. 993.3333. 993.3333. 888.88877777666544363. 1666.66700000000000000000000000000000000

programs are:

1. The boy did his own work

2. Attitude of the mother

3. Living on the farm

It can be seen from the table that five factors contributed to from 80 to 90 per cent of the boys' programs. One of these factors especially should be mentioned. The <u>F. F. A. activities</u> contributed to 83.3 per cent of the boys' programs.

Table XII shows the results of the checking done on the hindering factors by the thirty boys whose programs were classified as superior.

Three of the thirty-six factors may be considered as very important hindering factors, as they hindered from 26.6 to 46.6 per cent of the boys in their supervised farm training programs.

These factors are:

1. Lack of finances

2. Started too small

3. Farm too small.

Living in town hindered ten per cent of the boys in their programs. The other factors, as hindering factors, are considered of minor importance.

The Standard Class.-- From the questionnaires the writer obtained the checking that the boys made on the

Table XII Outstanding Hindering F	actors	of the
Superior Farm Training Programs of Thirty	Boys En	nrolled
in Vocational Agriculture		
	Hinde	ered
Factors	No.	%
 Lack of finances Started too small Farm too small Living in town Parents could not finance project Raised in town Widowed mother Written agreement Parents dovorced Living away from home Attitude of Mother Attitude of father Class work Planned project jobs in class Kept accurate records Had full responsibility of project Parents retained project ownership Parents retained project returns Teacher's project supervision Teacher's personal interest Started project on a paying basis Borrowed money to finance project Parents financed project Parents gave boy project Large farm Raised on farm Studied project jobs in class Studied project jobs in class Parents financed project Farents financed project Parents financed project Farents financed project Parents financed project Parents financed project Parents financed project Parents financed project Farents financed project 	1498422211111111000000000000000000000000000	46.6 326.6.6663333333333330000000000000000000
36. Love for farming	0	0.

factors that contributed to or hindered their supervised training programs.

Table XIII shows the results of the checking done on the contributing factors by the 105 boys whose programs were classified as <u>standard</u>.

Fifty-three or 50.4 per cent of the boys stated that seventeen of the thirty-six factors were important in contributing to the success of their programs. The number checking the other factors decreased rapidly with the succeeding factors listed, thus considering them of minor importance as contributing factors.

There are only two factors that contributed to 80 per cent or more of the programs. They are:

1. Living on a farm

2. Raised on a farm

Eight factors contributed to from 71.4 to 79 per cent of the boys' supervised farm training programs. These factors are:

1. Studied project jobs in 5. Attitude of mother class

2.	Had full responsibility of project	6. Did own project work
3.	F. F. A. activities	7. Attitude of father
4.	Kept accurate records	8. Class work

Table XIV shows the results of the checking done on the hindering factors by 105 boys whose programs were

Table XIII .-- Outstanding Contributing Factors of the Standard Supervised Farm Training Programs of 105 Boys Enrolled in Vocational Agriculture Helped Factors No. % 1. Living on farm 88 83.8 2. Raised on farm 84 80. 3. Studied project jobs in calss 83 79. 4. Attitude of mother 80 76.1 5. Had full responsibility of project 6. Did own project work 76 72.3 76 72.3 7. F. F. A. activities 76 72.3 8. Attitude of father 75 71.4 9. Kept accurate records 75 71.4 75 10. Class work 71.4 11. Teacher's personal interest 71 67.6 67 12. Desire for project credit 63.6 13. Teacher's project supervision 66 65 62.8 14. Planned project jobs in class 65 61.9 58 57 53 39 15. Love for farming 55.2 16. Desire to be state farmer 54.2 17. Handled own project returns 50.4 18. Parents finances project 37.1 35 33 32 33.3 19. Large farm 20. Started project on paying basis 31.4 30.4 21. Showed at fairs 28 26.6 22. 4-H Club membership 27 25.7 23. Parents gave project 24 22.8 24. Written agreement 22 25. Borrowed money for project 20.9 26. Parents retained ownership of project 11 10.4 2 27. Living in town 1.9 2 28. Living away from home 1.9 1 29. Lack of finances •9 30. Parents could not finance project 1 •9 1 •9 31. Raised in town 32. Started project too small 0 •0 0 33. Parents divorced .0 0 •0 34. Widowed mother 35. Farm too small 0 •0 36. Parents retained project returns 0 .0

Table XIV .-- Outstanding Hindering Factors of the Standard Supervised Farm Training Programs of 105 Boys Enrolled in Vocational Agriculture Hindered Factors No. % 33 30 1. Farm too small 32.5 28.7 2. Lack of finances 3. Started project too small 28 26.6 17 4. Living in town 16. 5. Raised in town 6. Parents could not finance project 15395443221 14.2 11.8 7. Parents kept returns of project 8.5 4.7 8. Attitude of father 3.6 9. Parents retained ownership of project 3.6 10. Living away from home 2.7 11. Attitude of mother 12. Planned project jobs in class 1.8 13. Widowed mother 1.8 •9 •9 •9 14. Parents divorced ī 15. Living on farm ī 1 16. Kept accurate records 10. Kept accurate records17. Handled own returns of project18. Had full responsibility of project •9 •9 •9 1 19. Did own project work ī 1 20. Showed at fairs .9 .9 21. 4-H Club membership 1 22. Desire for project credit •0 23. Raised on farm 0 0 24. Large farm .0 0 •0 25. Parents gave boy project 26. Parents financed project 0 .0 27. Borrowed money for project 0 .0 28. Started project on paying basis 0 .0 29. Teacher's personal interest 0 0 0 .0 30. Teacher's project supervision .0 31. Studied project jobs in class .0 0 •0 32. Class work 0 .0 33. F. F. A. activities 34. Desire to be state farmer 0 .0 35. Love for farming 0 .0 0 •0 36. Written agreement

classified as standard.

There are three outstanding hindering factors to the <u>standard</u> supervised farm training programs, hindering from 26.6 to 32.5 per cent of the programs. These factors are:

1. Farm too small

2. Lack of finances

3. Started project too small

The next four factors hindered from 8.5 to 16 per cent of the boys' programs. These factors are: 1. Living in town 3. Parents could not finance project 2. Raised in town 4. Parents kept project returns

The other factors are considered of minor importance as hindering factors to the <u>standard</u> supervised farm training programs.

The Unsatisfactory Class. - From the questionnaires the writer obtained the checking the boys had made on the factors that had contributed to or hindered their supervised farm training programs.

Table XV shows the results of the checking done on the contributing factors by the seventy boys whose programs were classified as <u>unsatisfactory</u>.

Thirty-five boys or 50 per cent of the boys stated that fifteen of the thirty-six factors were important in contributing toward the success of their programs. There were four factors considered as outstanding contributing factors to unsatisfactory supervised farm training

Table XV Outstanding Contributing Fa the Unsatisfactory Supervised Farm Training of 70 Boys Enrolled in Vocational Agricultur	ctors of Programs	
Factors	Helpe No.	đ %
 Attitude of father Attitude of mother Studied project jobs in class Did own project work Class work Raised on farm Teacher's personal interest Love for farming Had full responsibility of project Desire for project credit Kept accurate returns Living on farm F. F. A. activities Teacher's project supervision Planned project jobs in class Desire to be state farmer Handled own project returns Parents fincanced project Large farm Written agreement Showed at fairs Started project too small Parents retained project returns Living in town Parents could not finance boys' project Raised in town Living away from home Parents divorced Farm too small Farm too small Farm to small 	675428775555422100874152220487754220000 7664287755555555555555555555555555555555555	17285117772884 .5124788 .25226288

programs. These factors helped from 62.8 to 67.1 per cent of the programs, and are as follows: 1. Attitude of father 3. Studied project jobs in class 2. Attitude of mother 4. Did own project work

It may be seen from Table XV that the next eleven factors contributed to 50 per cent or more of the boys' programs and are considered important helping or contributing factors.

Table XVI shows the results of the checking done on the hindering factors by 70 boys whose programs were classified as <u>unsatisfactory</u>.

There are five factors that are considered to be outstanding hindering factors, affecting 17 to 41 per cent of the <u>unsatisfactory</u> programs. These factors are: 1. Living in town 4. Farm too small 2. Started project too small 5. Raised in town 3. Lack of finances

Three other factors hindered from 10 to 11 per cent of the programs and are as follows:

1. Parents retained project ownership

2. Living away from home

3. Parents kept project returns.

The remaining factors listed are considered of minor importance.

Table XVI .-- Outstanding Hindering Factors of the Unsatisfactory Supervised Farm Training Programs of 70 Boys Enrolled in Vocational Agricultural Hindered Factors No. % 29 1. Living in town 41.4 29 2. Started project too small 41.4 3. Lack of finances 23 32.8 18 25.7 4. Farm too small 12 5. Raised in town 17.1 6. Parents retained ownership of project 8 11.4 7 7 6 6 10. 7. Living away from home 10. ×8. XParents kept returns 9. Parents could not finance project 8.5 8.5 10. Attitude of father 54 11. Parents divorced 5.6 12. Borrowed money 13. Attitude of mother 4 X14. Paronts retained project yeturns 4 5.6 1222 2 2.8 15. Parents financed boys project 2.8 16. Parents gave boy project 2.8 17. Large farm

 19. Started project on paying basis
 1

 20. Widowed mother
 1

 2.8 1.4 ĩ 1.4 1.4 21. Raised on farm ī 22. Handled own project returns 1.4 l 23. Did own project work 1.4 ī 24. F. F. A. activities 1.4 0. 25. Written a greement 0 26. Love for farming 0. 27. Desire to be state farmer 0 Ο. 0 28. Desire for project credit Ο. 0 29. Showed at fairs 0. 0 30. Had full responsibility of project 0. 31. Kept accurate records 0 0. 0 32. Planned project jobs in class 0. 0 0. 33. Class work 0 0 0 34. Studied project jobs in class 35. Teacher's personal interest 0. 0. 36. Teacher's project supervision ο.

<u>Summary of the findings</u>.-- Tables XI, XIII and XV show the contributing factors affecting the <u>superior</u>, <u>standard</u>, and <u>unsatisfactory</u> supervised farm training programs of boys enrolled in vocational agriculture in the Salt River Valley of Arizona.

It may be seen from these tables that the outstanding contributing factors are of considerably more importance for the good programs than for the poorer programs. Ten factors contributed to 80 per cent or more of the superior supervised farm training programs, only two factors contributed to the same precentage of the <u>standard</u> programs, and not any factor contributed to above 67 per cent of the <u>unsatisfactory</u> supervised farm training programs.

The five outstanding contributing factors to the <u>superior</u> farm training programs, contributing to 90 per cent of the programs, are:

1. Had full responsibility of project

2. Handled own project returns

- 3. Did own project work
- 4. Attitude of mother

5. Living on a farm.

The five outstanding contributing factors of the standard supervised farm training programs, contributing

The five outstanding contributing factors to the <u>unsatisfactory</u> supervised farm training programs, contributing to from 58 to 67.1 per cent of the programs, are: 1. Attitude of mother 4. Class work 2. Attitude of father 5. Did own project work 3. Studied project jobs in class.

It should be noted that the outstanding contributing factors for the unsatisfactory group do not include such factors as:

1. Had full responsibility of project

2. Living on a farm

3. Handled own project returns.

There were only 52.8 per cent of the <u>unsatisfactory</u> group who were <u>Living on a farm</u>. This is, no doubt, the major cause for unsatisfactory programs.

Tables XII, XIV, and XVI show the hindering factors of the superior, standard and unsatisfactory supervised farm training programs of boys enrolled in vocational agriculture.

It may be seen from these tables that there are					
four outstanding hindering factors for the superior					
group. These factors are:					
1. Lack of finances 3. Farm too small					
2. Started project too small 4. Living in town					
There were six outstanding hindering factors to the					
standard supervised farm training programs. These					
factors are:					
1. Farm too small 4. Living in town					
2. Lack of finances 5. Raised in town					
3. Started project too 6. Parents could not finance small project					
There were eight outstanding hindering factors to					
There were eight outstanding hindering factors to					
There were eight outstanding hindering factors to the unsatisfactory supervised farm training programs.					
There were eight outstanding hindering factors to the unsatisfactory supervised farm training programs. These are:					
There were eight outstanding hindering factors to the unsatisfactory supervised farm training programs. These are: 1. Living in town 5. Raised in town					
There were eight outstanding hindering factors to the unsatisfactory supervised farm training programs. These are: 1. Living in town 5. Raised in town 2. Started project too 6. Rarents retained ownership small of project					
There were eight outstanding hindering factors to the unsatisfactory supervised farm training programs. These are: 1. Living in town 5. Raised in town 2. Started project too 6. Rarents retained ownership small 0 f project 3. Lack of finances 7. Parents kept returns from project					
There were eight outstanding hindering factors to the unsatisfactory supervised farm training programs. These are: 1. Living in town 5. Raised in town 2. Started project too small 6. Rarents retained ownership of project 3. Lack of finances 7. Parents kept returns from project 4. Farm too small 8. Living away from home					
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CHAPTER VII

THE CONDITIONS AND ATTITUDES AFFECTING THE SUPERVISED FARM TRAINING PROGRAMS OF BOYS ENROLLED IN VOCATIONAL

AGRICULTURE

The writer thought that the thirty-six factors influencing the supervised farm training programs and other facts acquired through the questionnairs used in this study, naturally grouped themselves into the following divisions, representing the important conditions and attitudes influencing supervised farm training programs:

1. Home conditions

2. Farming conditions

3. School conditions

4. Parents' attitudes

5. Boys' attitudes

A description of these conditions and attitudes follow:

<u>Home Conditions</u>.- In order to do a good job, a vocational agriculture teacher must know the home conditions of the boys enrolled in his department. The following are some of the factors considered under this group. What parental influence does the boy have? How well educated are his parents? What is the occupation of his father? What is the financial status of his parents?

Farming Conditions. Since farming is largely of a practical nature, the best place to learn farming is on the farm. It is generally agreed that a boy taking vocational agriculture should have a farm on which he can do his practice work and grow into the business of farming. Some of the factors that may be considered under this group are: Does the boy live on a farm, and if so what size is it? What facilities can the boy have for a supervised farm training program? What experience has the family had in farming? These factors and others may have a very definite effect on the boy's farm training experience.

<u>School Conditions</u>.- These conditions are more of a check on the teacher and school to know what advantages and facilities can be offered. These conditions are all vital to the boy's training program. Does the teacher take a personal interest in the boy's problems? Does the teacher give ample project supervision? Does the class work meet the needs of the students? What special activities are sponsored by the school which offers training in leadership to the boy? These and other factors may have an effect on the boy and his supervised training program.

<u>Parents' Attitude</u>.- One can readily see that the parent's attitude may have much to do with the success

or failure of a boy's supervised farm training program. Are the parents favorable toward education in general? Do they favor a strong supervised farm training program? Can the boy own and manage his own supervised farm training program? Does the boy get the returns from his project? These are a few of the factors considered under this heading.

The Boy's Attitude.- The boy's attitude may be a vital factor in determining the success of his program. Is the boy willing to work and sacrifice for his program? Is he ambitious and interested in his work? Does he have leadership ability? Is he willing to cooperate with others? These and other factors may be very important to a boy's supervised farm training program.

A list of the factors considered under each group is given in Chapter II, Table II.

The following tables show how the conditions and attitudes mentioned have affected the <u>superior</u>, <u>standard</u>, and unsatisfactory supervised farm training programs.

Table XVII shows that the occupation of the father is an important factor. More than 79 per cent of the fathers of the <u>superior</u> group, 62.5 per cent of the fathers of the <u>standard</u>, and only 29.2 per cent of the fathers of the <u>unsatisfactory</u> group were farmers.

Table XVII .- Home Conditions of the Superior, Standard, and Unsatisfactory Supervised Farm Training Programs of Boys Enrolled in Vocational Agriculture

Factors	Superior %	Standard %	Unsatis- factory %
1. Living with parents	98.3	97.5	87.4
2. Size of family (Number of children average)	5	5.5	4.9
3. Farming - as occupation of father	79.6	62.5	29.2
4. Finalncial status A. Above average B. Average C. Poor	6.6 86.8 6.6	4.8 82.5 15.2	0 78•5 17•5
5. Parents could not finance project	6.6	II. 8	8.5
6. Lack of finances	46.6	28.7	32.8
7. Widowed mother	6.6	1.8	1.4
8. Parents divorced	3.3	•9	7.2
9. Living away from home	3.3	3.6	10.0
 10. Education of Parents A. Attended college B. Attended high school C. Attended grammer scho The parental influence i 	43.3 26.0 00130.7 .s most fur	27.5 45.0 27.5 orable to	28.5 42.8 20.7 the
superior group. There is a h	igher perc	entage of	the
superior group living with th	eir parent	s, and a l	owe r
percentage having divorced pa	rents than	with the	<u>unsat</u> -
isfactory group. The parents	of the <u>su</u>	perior gro	up of

boys have a higher educational status than have either of the other groups. The financial status favors the <u>superior</u> group slightly. There were 86.6 per cent of the <u>superior</u> group, 82.5 per cent of the <u>standard</u>, and 78.5 per cent of the <u>unsatisfactory</u> group with an average financial status. Thus, the home conditions of the superior group are more desirable than those of the other groups.

Table XVIII- Farming Conditions of the Superior, Standard, and Unsatisfactory Supervised Farm Training Programs of Boys Enrolled in Vocational Agriculture in the Salt River Valley of Arizona.

Factors	Superior %	Standard %	Unsatis- factory %
1. Lives on farm	96. 6	83.8	52.9
2. Raised on farm	96.6	80.	57.1
3. Lives in town	3.4	12.5	47.1
4. Raised in town	3.4	20.	42.8
5. Large farm160 acres and over	36.6	28.5	16.
6. Farm too smallless than 20 acres	16.7	32.3	63.5
7. Parents experienced in farming	90.	87.5	71.5
8. Parents can start boy in farming	7 3•3	42.5	34.3
9. Average size of farm	214 acr	es 137.3 ac	res 125 acres

Table XVIII shows that the farming conditions are more desirable for the <u>superior</u> groups than for the others. Over 95 per cent of the <u>superior</u> group live on farms, while 83.8 per cent of the <u>standard</u> and 52.9 per cent of the unsatisfactory group live on farms.

The table further shows that 36.3 per cent of the <u>superior</u> group lived on farms larger than 160 acres, while 28.5 per cent of the <u>standard</u> and 16 per cent of the <u>unsatisfactory</u> group lived on farms larger than 160 acres. There were 16.7 per cent of the <u>superior</u> group who lived on farms smaller than 20 acres, while more than 63 per cent of the <u>unsatisfactory</u> did so. This table also shows that more of the parents of the <u>superior</u> group than from the other groups could start the boys in farming.

Table XIX shows that the teachers gave ample supervision to 90 per cent of the <u>superior</u> group, and only 66.6 per cent said that it had helped them.

The teacher's personal interest helped 76 per cent of the <u>superior</u> group and 57 per cent of the <u>unsatis-</u> <u>factory</u> group. The teacher was the incentive for the supervised farm training programs of 33 per cent of the <u>superior</u> group and 53 per cent of the <u>unsatisfactory</u> group.

Table XIX- School Conditions of the <u>Superior</u>, <u>Standard</u>, and Unsatisfactory Supervised Farm Training Programs of Boys Enrolled in Vocational Agriculture

	Factors		Superior %	Standard %	Unsatis- factory %
1.	Teacher's project a	supervis helped	ion 66.6	62.8	51.4
2.	Teacher gives ample	e super- vision	90.	90.	82.
3.	Teacher's personal	interes	t 76.6	67.6	57.1
4.	Studied project jo	bs in class	100.	92.5	94.3
5.	Planned project jo	bs in class	73.3	61.9	50.
6.	Studied record keep	ping in class	96.6	97.5	88.
7.	Checked project rea	cords in class	96 .6	87.5	94.
8.	Class work		83. 3	71.4	58.5
9.	F. F. A. activities	9	83.3	72.3	52.8
10.	Was 4-H Club member	r	30.	26.6	22.8
11.	Showed at fairs		3 3.3	30.5	22.8
12.	Teacher was the ind	centive	33.3	40.9	53•3

<u>Class work</u> was helpfulto all groups, but more so to those with the better programs.

Future Farmer activities, showing at fairs, and <u>4-H Club membership</u> rated higher with the <u>superior</u> group than with the other groups.

	Table XX	Parent's	Attitudes	and The	ir Effect on
the	Superior,	Standard, a	nd Unsatisf	actory	Supervised
Farm	Training	Programs			

	Factors	Superior %	Standard %	Unsatis- factory %	
1.	Parents favor education	97.6	97.5	97.1	
2.	Parents favor farming as as occupation	93.0	77•5	74.1	
3.	Parents favor a strong project program	93.0	77.5	61.1	
4.	Boy owns project	100.0	90.	60.1	
5.	Boy g ets returns from project	100.0	92 .5	45.7	
6.	Boy manages project	100.0	90.	62.1	
7.	Parent helped finance boy's project	70.0	56.1	52.8	
8.	Parents gave boy his project	36.6	31.4	34.2	
9.	Parents were incentive for project	46.6	45.7	28.5	
10.	Parents kept project returns	00.00	8.5	8.7	
11.	Parents and boy have written agreement	36.6	23.8	25.7	
12.	Helpful attitude of father	80.0	71.4	67.1	
13.	Helpful attitude of mothe	r 93.3	76.1	65.7	
	Table XX shows that the	parents a	ttitude of	the	
superior group excels that of the parents attitude of					
the other groups because they are more favorable toward					

farming as an occupation and toward strong project programs and give the boys the responsibility of the ownership, the returns, and the management of their projects. There are a larger percentage of parents from the superior group than from the other groups that helped finance their boys' programs.

Table XXI shows that 80 per cent of the <u>superior</u> group are going to farm, while only 60 per cent of the <u>unsatisfactory</u> group are planning to do so.

A comparison of the superior and the unsatisfactory groups will be briefly made to show the difference in the attitudes of the boys of the two groups. The superior group excels as follows: 1. 22 per cent more of the boys do their own work 2. 43 per cent more of the boys pay project costs 3. 38 per cent more of the boys manage their projects 4. 19 per cent more of the boys helped finance their own projects 5. 14 per cent more of the boys used a personal loan 6. 17 per cent more of the boys were the incentive for their own projects 7. 35 per cent more of the boys liked farming 8. 58 per cent more of the boys want to be State F. F. A. Farmers 9. 36 per cent more of the boys started their projects on a paying basis.

Table XXI .- The Boy's Attitudes and their Effect on the Superior, Standard, and Unsatisfactory Supervised Farm Training Programs.

	Factors	Superior %	Standard %	Unsatis- factory %
1.	Boy is going to college	60.	72.5	48.5
2.	Boy is going to farm	80.	72.5	60.
3.	Farming occupation is first choice	83.3	65.	52.7
4.	Boy does own work	93.3	92.5	71.4
5.	Boy pays cost of project	66.6	52.5	22.7
6.	Boy manages own project	100.	9 0.	62.1
7.	Boy helped finance project with own savings	56.6	35.2	37.1
8.	Boy used personal loan	23.3	14.2	8.5
9.	Boy was incentive for own project	n 53.	41.9	36.2
10.	Boy keeps accurate record	ls 93.3	90.	54.3
11.	Boy likes farming	73.0	55.2	37.1
12.	Boy wants to be State F. F. A. Farmer	83.3	7 2.3	35.2
13.	Boy started project on paying basis	50.	31.4	13.3
14.	Boy started project too small	50.	68.6	86.7
15.	Desire for project credit	t 66.6	63.6	5 5 .7

CHAPTER VIII

SUMMARY

One of the most important problems arising in this study was: What are the outstanding factors contributing and hindering to the supervised farm training programs of vocational agriculture students?

<u>Outstanding Contributing Factors</u>.-- From the 205 students' and the ten teachers' questionnaires used in this study it is found that the outstanding contributing factors are:

- 1. Studied project jobs 3. Attitude of mother.
 - in class. 4. Did own project work.
- 2. Living on a farm. 5. F. F. A. activities.

Outstanding <u>Hindering Factors</u>.-- From the 205 students' and the ten teachers' questionnaires used in this study we find that the outstanding hindering factors are:

- 1. Living in town. 3. Started project too small.
- 2. Lack of finances. 4. Farm too small.

5. Raised in town.

<u>Outstanding Contributing and Hindering Factors to the</u> <u>Superior Supervised Farm Training Programs.--</u> From the thirty student programs which were selected as superior the following factors are outstanding:

Contributing Factors

Had full responsibility 3. Did own project work.
 of the project. 4. Attitude of mother.
 Handled own project re- 5. Living on a farm.
 turns.

Hindering Factors

1. Lack of finances. 3. Farm too small.

2. Started too small. 4. Living in town.

5. Parents could not finance boy's project.

<u>Outstanding Contributing and Hindering Factors to the</u> <u>Standard Supervised Farm Training Programs.--</u> From the 105 student programs which were selected as standard the following factors are outstanding as:

Contributing Factors

Living on a farm. 3. Studied project jobs in class
 Raised on a farm. 4. Attitude of mother.

5. Had full responsibility of project.

Hindering Factors

1. Farm too small. 3. Started project too small.

2. Lack of finances. 4. Living in town.

5. Raised in town.

<u>Outstanding Contributing and Hindering Factors to the</u> <u>Unsatisfactory Supervised Farm Training Programs</u>.-- From the seventy student programs which were selected as unsatisfactory the following factors are outstanding as:
Contributing Factors

1.	Attitude of father.	4. Did own project work.
2.	Attitude of mother.	5. Class work.
3.	Studied project jobs	6. Raised on farm.
	in class.	

Hindering Factors

1.	Living in town.	6.	Parents retained
2.	Started project too small.		project ownership.
3.	Lack of finances.	7.	Parents kept project
4.	Farm too small.		returns.
5.	Raised in town.	8.	Living away from hom

The effects of the conditions and attitudes on the supervised farm training programs are as follows:

<u>Home Conditions</u>.-- If a boy's father is a farmer and the boy is living at home with his parents on a farm, he has a much better chance of succeeding in his supervised farm training program. Table XVIII shows that 79.6 per cent of the fathers of the boys having superior supervised farm training programs were farmers, while only 29.2 per cent of the fathers of boys having unsatisfactory supervised farm training programs were farmers. A larger percentage of the boys having superior programs were living with their parents than were the boys having unsatisfactory programs.

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Farming Conditions.-- A boy should be living on a farm that will provide the facilities for a satisfactory supervised farm training program. The size of the farm is not important so long as it furnishes the satisfactory facilities to meet the boy's needs.

<u>School Conditions</u>.-- The proper teacher-student relationship is very important in contributing to a boy's supervised farm training program. This consists of:

1. Teacher's personal interest.

2. Teacher's project supervision.

A functioning type of class work based on the project jobs of the individual boys contribute much to the programs of the boys.

Special school activities are also very important in helping the boys, such as the F. F. A. activities and showing at fairs.

<u>Parents' Attitudes.--</u> It is very important that the parents favor farming as an occupation, and also favor a strong project program for the boy. The above two factors determine whether the parents will

1. Allow the boy to own his own project, manage it, and get the returns from it,

2. Assist the boy in developing his program.

Boy's Attitude.-- The boys with the superior farm training programs show an excellent attitude toward their work. They have a distinct advantage over the boys of the other groups in that:

1. They do more of their own work,

2. A larger percentage of them pay all costs of their projects,

3. More of the boys manage their own projects,

4. More of them finance their own projects,

5. More like farming, and want to farm,

6. More started their projects on a paying basis,

7. More of them want to be State Farmers.

<u>How the Findings may be used</u>.-- It is hoped by the writer that the findings of this study may be of use to parents, teachers, and students of vocational agriculture in making them more conscious of the outstanding contributing and hindering factors to the supervised farm training programs, while planning and building up the boys' supervised farm training programs.

BIBLIOGRAPHY

Books

- Almack, John C., "Research and Thesis Writing" Houghton Mifflin Co. Chicago, Ill.
- Cook, Glen Charles, "Hand Book on Teaching Vocational Agriculture", Interstate Printing Co. Danville, Ill.
- Eaton, Theodore H., "Vocational Education in Farming Occupations", J. B. Lippincott Co. Chicago, Ill.
- Lattig, H. E., "Practical Methods in Teaching Vocational Agriculture", McGraw Hill Co. New York
- Prosser Charles A., and Allen Charles R., "Vocational Education in a Democracy", Century Co. New York
- Schmidt, G. A., "Efficiency in Vocational Education in Agriculture", Century Co. New York
- Schmidt, G. A., "New Methods in Teaching Vocational Agriculture", Century Co. New York
- Schmidt, G. A., "Projects and the Project Method in Teaching Agricultural Education", Century Co. New York
- Schmidt, G. A., "Vocational Education in Agriculture in Federally Aided Schools", Teachers College, Columbia University New York
- Smith, Z. M., "The Work of the Teacher of Vocational Agriculture", Indiana University, Lafayette, Indiana
- Stimson, "Vocational Agricultural Education by Home Projects", Macmillan Co. San Francisco, Calif.

Bulletins

- Federal Board for Vocational Education, "The Home Project" Bulletin 71
- Federal Board for Vocational Education, "Supervised Practice in Agriculture", Bulletin 83
- Federal Board for Vocational Education, "Supervised Practice in Agriculture Including Home Projects" Bulletin 112

Federal Board for Vocational Education, "Agricultural Project Planning", Bulletin 117

Federal Board for Vocational Education, "Training Teachers in Supervised Farm Practice Methods", Bulletin 165

Papers

Lattig, H. E., "Insuring Worth While Projects in Vocational Agriculture by Securing Cooperation of Parents", Paper, University of Idaho

Schmidt, G. A., "Teaching Farm Shop Work and Farm Mechanics through Pupil Projects", Paper, Colorado Agricultural College.

APPENDIX Teachers Questionnaire

This is a study of the factors influencing the type of supervised home projects in agriculture carried by boys who are and have taken vocational agriculture in the Salt River Valley of Arizona.

Please check the following factors as you think they effect the boys project program. Also rate each factor on a basis of ten points for those factors that you feel are of greatest importance, five points for average, and one for those you feel are of little importance. Rate each factor from one to ten according to their importance. For example, if living on a farm is considered very important rate ten in the helped column.

		Helped	Hindered
1.	Living on farm		Mit with the state of the state
2.	Raised on farm		an anan - amananga kara anangangan ananga sanga sa
3.	Living in town		an an ghuan ar ann ann an an an ann ann an ann
4.	Raised in town		an a state o any united state of the state of
5.	Farm too small		
6.	Large farm		
7.	Attitude of father		
8.	Attitude of mother		
9.	Widowed mother		
10.	Parents divorced		
11.	Living away from home		
12.	Parents gave me my project		

Helped Hindered 13. Parents financed my project_____ 14. Parents could not finance my project 15. I borrowed money to finance project 16. Lack of finances 17. Started project on a paying basis 18. Started project too small 19. Teacher's personal interest 20. Teacher's project supervision_____ 21. Studied project jobs in class_____ 22. Class work 23. Planned jobs in class_____ 24. Kept accurate records 25. Handled own project returns 26. Had full responsibility of project____ 27. Parents retained ownership of project_ 28. Parents retained project returns 29. Did own project work 30. Showed at fairs_____ 31. 4-H club membership 32. F. F. A. activities 33. Desire for project credit_____ 34. Desire to be a state farmer_____ 35. Love for farming 36. Written agreement

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STUDENT	QUESTIONNAIRE
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A study of the factors influencing the type of supervised projects in agriculture carried by boys who are and have taken vocational Agriculture in the Salt River valley of Arizona. The purpose is to study the factors influencing your project activities as a means of helping boys in planning their project work; also to assist the Vocational Agriculture teachers in the job of getting boys established in the business of farming through their project programs. All information will be strictly confidential.
PART I
School
Boys age Year in school
Year in Agriculture
Check the following or give the number as needed.
Fathers age Mothers age
Parents living-Father Mother
Parents divorced; living with parents
Occupation of parentsFather Mother
Parents farming experience Years
Nationality of parents
Size of family-boysGirls
Attitude of parents toward education-(a) favorable- (b) tolerant- (c) unfavorable.
Attitude of parents toward farming as a vocation- (a)favorable (b) tolerant (c) unfavorable.
Opportunity of boy to work into partnership with parents
Yes No
Parents able to start boy in farming-Yes No

PART	I CONTINUED.							
	Parents encouraged boy to build a strong project program YesNo							
	Financial status of parents-well to doAverage							
	Do parents live on farm in town							
	Size of farm acres acres owned rented							
	Livestock on farm No. of cows horses							
	hogssheeppoultryothers							
	Crops Cotton acresAlfalfa acres small grain others							
	Does your father breed pure bred livestock Yes No							
	Educational status of parents father: college gradu- ate, high school, grammar school							
	Mother: college, high school, grammar school							
	Are you planning to go to college yes No							
	Do you plan to farm? Yes No							
	What occupation do you plan to follow? First choice Second cnoice							
	PART II							
PLEAS	E SET DOWN YOUR ACTUAL PROJECT PROGRAM TO DATE							
ENTER	PRISE PRE HIGH FRESH- SOPHO- JUNIOR SEN- POST SCHOOL MAN MORE IOR HIGH							
DAIRY	COWS							
HEIFE	RS							
CALVE	S							
BROOD	SOW							

ENTERI	PRISE	PRE HIGH SCHOOL	FRESH- MAN	SOPHO- MORE	JUNIOR	SEN- IOR	POS1 HIGH
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						an a	
e AS POS	SIBLE	ANSWER THE	E FOLLOWI	NG QUEST	IONS AS	ACCURA	TELY
1. Hc		financed w	town mmod	$aat \cdot (a)$	Domonta	finan	
) 1	b) Pa .oan _	rents gave	you a st (d) Own	art savings	(c)	Person	al
(1 2. We	b) Pa .oan _ ere yo	rents gave	you a st (d) Own	ect; (a) art savings Yes _	(c)	Person	al
(] 2. We 3. Do	b) Pa .oan ere yo you	u a 4H Club get the ret	you a st (d) Own member? ourns fro	art savings Yes _ m your p	rarents (c) No roject?	Yes	No
(1 2. ₩€ 3. Do 4. Pa	b) Pa oan ere yo you	u a 4H Club get the ret retain own	you a st (d) Own member? ourns fro	ect; (a) art savings Yes _ m your p f projec	rarents (c) No roject? t? Yes	Yes N	
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(] 2. ₩€ 3. Dc 4. ₽₽ 5. Bo 6. Bo 7. Do	b) Pa oan ere yo o you arents by has by doe you	rents gave u a 4H Club get the ret retain own full manag s most of t pay parents	you a st (d) Own o member? ourns fro hership o gement of the labor of for fee	f project on proj d and re	roject? Ves roject? t? Yes ect? Yes nt for l	Yes N N N N and? Y	No o o es
(] 2. ₩€ 3. Dc 4. Pa 5. Bc 6. Bc 7. Dc N 8. Bo	b) Pa oan ere yo o you arents by has by doe o you co by has	rents gave u a 4H Club get the ret retain own full manag s most of t pay parents written co	you a st (d) Own o member? curns fro hership o gement of the labor of for fee	Yes _ m your p f project on proj d and re	roject? Ves roject? t? Yes ? Yes ect? Yes nt for 1 nts? Ye	YesN N N N and?Y	No No No No No
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PART	III CONTINUED		***
18	Stanted project too gmall	Helped	Hindered
19.	Teachers personal interest		
20.	Teachers project supervision		
21.	Studied project jobs in class		
22.	Class work		
23.	Planned jobs in class		
24.	Kept accurate records		
25.	Handled own project returns		
26.	Had full responsibility of project		
27.	Parents retained ownership of project	t	
28.	Parents retained project returns		
29.	Did own project work		
30.	Showed at fairs		
31.	4H club membership		
32.	F. F. A. activities		
22.	Desire for project credit		
24.	Love for forming		
36	Written agreement		