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Effective Techniques of Supervision for Instruction in Vocational Agriculture

Otis C. Wooten
Prairie View Agricultural And Mechanical College

EFFECTIVE TECHNIQUES OF SUPERVISION FOR INSTRUCTION IN VOCATIONAL AGRICULTURE

By

Otis C. Wooten

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To my wife, Elois Lynell Wooten; my son, Donald Earl Wooten; and my daughter, Charlotte Yvonne Wooten whose continued and untiring assistance will forever be cherished.

Otis C. Wooten

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INTRODUCTION

JUSTIFICATION OF STUDY

Farming in America, as well as in every other country, is the oldest of occupations. It is vital to the well-being of all people and has been in a constant state of change as well as development from the very earliest to the present time. For a long time people have been concerned with making a systematic search for truth in the realm of agriculture as a means of increasing production, improving economic returns, and bettering living conditions for farm people generally. Herein lies the basis for undertaking this study.

Most teachers of agriculture have long realized that for the satisfactory development of programs of supervised farming, instruction at school is not enough, regardless of how well it is done. To be successful in all his teaching activities the vocational agriculture instructor must be just as much concerned with the out-of-school agricultural activities of his boys as with those which he conducts in the classroom. If farming programs are regarded as productive and as a step to becoming progressively established in farming, are of adequate

scope, studied, planned, and carried through to completion by the boys, they need much real supervision in order to be kept going right and to be brought to a proper completion. In supervising farming programs on the home farm the instructor has numerous supervisory responsibilities. The degree to which he is able to carry them out successfully will indicate the effectiveness of his supervision. Farming is a complex business and this complexity will diminish only to the degree that teachers of vocational agriculture utilize all resources in the development of supervised farming programs.

Specifically, then, the aim of the writer of this study is to bring into light some of the effective techniques of instruction in vocational agriculture effecting the development of supervised farming programs with boys enrolled in the high schools of the State of Texas.

PURPOSE OF THE STUDY

In the preliminary statements of the introduction, an attempt was made to establish the importance of farming as an occupation and to justify research in all of its many areas.

Since the passage of the Smith-Hughes Act in 1917, teachers of Vocational Agriculture have employed a variety of techniques in developing and supervising farming programs with all-day students on the home farm. The study has been conducted in order to isolate the techniques contributing most to the success of farming programs.

The use of some of these practices which are rated high, in this study, should result in teachers of vocational agriculture doing a more effective job of supervising the farming programs of their all-day students.

SCOPE OF STUDY

This study is primarily concerned with the effective techniques for supervision of farming programs of all-day boys on the home farm.

This study deals with information compiled from data supplied by a representative group of vocational agriculture teachers in Area I, Area II, and Area III.

In making this study, the writer does not wish to point out the weaknesses of any particular program or teacher, but rather to make possible an overview of the factors which have in the past contributed to the development of supervised farming programs. No attempt was made to determine the causes of the conditions found.

METHOD OF INVESTIGATION

Because this study was designed to determine factors responsible for existing conditions with regard to the effective techniques for supervision of instruction in vocational agriculture, the Normative Survey Method of Investigation was employed. After the selection of the subject, the writer proceded to make a preliminary survey of related information.

Each of three Area Supervisors was asked to supply the writer with the names and addresses of his teachers of Vocational Agriculture. At random, 100 teachers were selected to assist in this study. Each teacher was mailed a questionnaire to be used in the collection of data. Eighty forms were executed and returned. The data from the questionnaires was compiled by the writer in developing this study of factors effecting techniques for supervision of instruction in vocational agriculture.

DEFINITION OF TERMS

Certain terms used in this study seem to need defining in order that the reader may interpret the idea correctly.

The following definitions have been approved by the United States Department of Agriculture and Land Grant Colleges and Universities.

Effective Technique is one of the small units of action on the part of a teacher of Vocational Agriculture which together form a procedure or method that gives the desired results in supervising the farming program of all-day students.

Farming Program are activities to provide experience which contribute to development of abilities that are needed for proficiency in the type of farming in which the student is likely to engage, consisting of the following enterprises: productive, supplementary farm practice, and placement for farm experiences.

Supervision of Farming Program refers to the supervision

given the student by the teacher on the boy's home farm or such places as may be used for the conduct of the boy's project program.

All-day Students are pupils who are regularly enrolled in a daily high school class of Vocational Agriculture operated as a regular unit of the school and in which the class meets for the time approved by the State Plan for Vocational Agriculture.

NEED FOR STUDY

Since the passage of the Smith-Hughes Act in 1917 and the establishment of the Vocational Agriculture Departments in high schools, teachers have been using a variety of practices in supervising the farming program of all-day students.

There has been a difference of opinion among the teachers as to what constitutes proper supervision of farming programs.

The need for this study lies in the fact that there is a difference of opinion as to what constitutes effective techniques in supervising farming programs.

E. O. Bolender points out or states that there is a need for frequent and careful supervision to secure proper development of the students' farming program. He states:

> "Difference of opinion among workers in agricultural education has been expressed concerning the need for detailed supervision of boy's farming programs, provided a good job of class teaching has been done, plans of practices have been well formulated, and home situations are favorable. There is an abundance of evidence to indicate that boys, even in the most favorable situations, will not develop their program to the degree which is possible without frequent and careful supervision. It is in no sense a reflection on the quality of class teach-

> ing to assume that it does not go all the way and that there must be a follow-up with individual teaching through supervision. Good class teaching furnishes the foundation on which plans of practices may be built and effective supervision carried out; it does not take the place of individual work with boys."[1]

The idea that there is a difference of opinion as to what constitutes proper supervision of a farming program is illustrated in a study made by C. H. Wiswall of Idaho: He says:

> "The number of visits per project made by various teachers ranged from 11.4 in the highest school to two in the lowest schools."[2]

George P. Deyoe[3] indicates the importance of proper supervision of the farming program by pointing out that classroom teaching alone is not sufficient to bring about the best results.

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1 E. O. Bolender, C. E. Rhoad, and H. G. Kenestrick, Teaching Procedures in Developing Boys Through the Use of Their Farming Programs, Dept. of Ag. Ed. (Ohio State Univ., Columbus, 1940), Chapter IV., p. 73

2 C. H. Wiswall, A Study of Project Supervision in Idaho for the Years 1932-33 and 1933-34, p. 146.

3 G. P. Deyoe, Supervised Farming in Vocational Agriculture,(Interstate Publishing Company: Danville, Ill., 1949), p. 331.

BASIC ASSUMPTIONS

1. This study is based upon the hypothesis that teachers of Vocational Agriculture employing effective techniques in supervision of the farming programs of all-day students is a must to build and maintain a successful program of vocational agriculture.

2. That good teacher-parent-pupil relationship is the basis as an effective technique for the development of successful programs.

3. A selected group of teachers can indicate effective practices that should be used by most teachers of vocational agriculture.

4. That the selected group of teachers may provide valid, reliable information regarding the practices used in supervising the farming programs of all-day students.

5. That individual differences in teacher personnel and classroom procedure affect the quality and number of programs developed.

RELATED LITERATURE

In reviewing related literature the writer found that various authors have written books, thesis, and articles on supervised farming programs.

Bundy, in his writing, states that:

> The Vocational Agriculture teachers are not meeting the needs of young farmers in any state. His solution to this problem is program expansion. At the end of the fiscal year ending June 30, 1954, sixty-one per cent of the enrollment in Vocational Agriculture in the nation were high school students, thirty-three per cent were adult, and only six per cent were enrolled in young farmer classes. The question arises as to what happens to supervised farming programs established in high school.[1]

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[1] C. B. Bundy, "A Responsibility Un-met," The Agricultural Education Magazine, Vol. 28 (November, 1955), p. 99.

Rutledge[1] found that not enough supervisory visits were made to have farms. If the visits were made, they were not reported as such. The desirable practice of contacting more than one person per home visit was followed, to some extent.

Wiswall[2], in his study, attempted to determine distribution of visits. Whether or not teachers make visits which coincide with critical periods in projects. The study failed to show conclusively that project visits were determined by the needs of the boys.

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1 Paul Rutledge, Analysis of Official Travel Done by Vocational Agriculture Teachers, M. S. Thesis, 1950, Prairie View A & M College, Texas (Library, Prairie View College),p. 39.

2 C. H. Wiswall, A study of Project Supervision in Idaho for the Years 1932-33 and 33-34, M. S. Thesis, 1936, University of Idaho, p. 146.

In additional literature, G. W. Weigers stated that:

> "The Smith-Hughes Act states that the school shall provide for directed or supervised practice in agriculture, either on a farm provided for by the school, or other farm, for at least six months per year. This provision was apparently based on the assumption that agriculture cannot be taught effectively in isolation from active practice, that persons need educational assistance in performing agricultural activities, and that in order to secure desirable outcomes, farm practices be extended over a reasonable length of time such as a production cycle.
>
> The provision in the foregoing act relating to educational direction on farms has been generally accepted by administrators and teachers of Vocational Agriculture throughout the United States. Many terms have entered into the picture concerning the implementation of this original provision, such as: follow-up of instruction, follow-up supervision, supervisory on-farm visits, on-farm training, on-farm instruction, and many others. These terms generally imply contact between instructor and enrolle on a farm for instructional purposes. Through the years effort has been directed toward understanding and improving certain aspects of instruction away from the school house.
>
> Studies made by McCutcheon revealed a definite relationship between the average number of home visits made by vocational agriculture teachers and the per-cent of students completing supervised farming programs.[1]

Kissam, in his study, stated that:

> "the supervision of farming programs appeared weak in organization to secure accomplishments of specific objectives. Farming program supervision should receive special attention in teacher training and in meetings conducted by the supervisors for inservice teachers to correct this situation".[2]

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[1] G. W. Weigers, "Providing on Farm Instruction", The Agricultural Education Magazine, Vol. 3 (June, 1958), p. 50.

[2] W. L. Kissam, A Study of the Supervision of Farming Programs of All-day Students, M. S. Thesis, 1951, p. 58.

Chapter II

PRESENTATION AND ANALYSIS OF DATA

EVALUATION OF FARMING PROGRAM SUPERVISION TECHNIQUES AND PRACTICES

The evaluation of certain techniques and practices used in the supervision of the farming program of all-day students was made by eighty vocational agriculture teachers of Texas.

As shown in Table One (I), teachers employed, principally, one or more of ten (10) specified methods of supervision of farming programs.

Two methods were used to determine the importance or effectiveness of these practices.

First, each teacher indicated whether the practice was used. Second, what value did the teacher place upon the practice. Comparing those rankings should give a good measure of the effectiveness of the practice.

A list of the possible practices was prepared and mailed to one-hundred teachers in the form of a questionnaire. These teachers were asked to check the practices according to effectiveness, using the following scale: High = 1; Average = 2; Low = 3.

The data supplied by eighty teachers of vocational agriculture was tabulated and is presented in Table I.

The final score of all of the practices used in supervision of the farming programs was very high showing the fact that they should all be considered important practices when

THE RANKING OF PRACTICES USED IN SUPERVISION OF THE FARMING PROGRAMS OF ALL-DAY STUDENTS ON THE HOME FARM

ITEMS	Number of Teachers Reporting	Percent of Teachers Using	Percent of Teachers Ranking the Item as Number		
			1	2	3
1. Develop a working relationship between the boy, parents and teacher	80	100	67.50	5	27.50
2. Check students Project Record Book	80	100	41.25	56.25	2.5
3. Encourage the use of improved practices taught in class	80	100	47.5	51.25	1.25
4. Group Visitation	79	98.75	7.5	52.5	38.75
5. Conference with individual boys	79	98.75	55	43.75	
6. Provide more effective guidance in selecting and planning a farming program	79	98.75	50	48.75	
7. Teach new skills	78	97.50	17.50	47.50	32.50
8. Help boy solve new problems which have arisen. Modify plans	78	97.50	54.69	42.31	
9. Guide the students into new projects	77	96.25	6.25	53.75	36.25
10. Assist the boys at long-range, by telephone or letter	66	82.50	1.25		81.25

supervising the farming programs of all-day students.

There was a range from 82.50 for the lowest, to 100 for the highest ranking practice.

A study of the rankings as shown in Table I, indicates three of the listed practices ranked at the top, these practices are: (1) Check students Project Record Book, (2) Develop a working relationship between the boy, parents, and teacher of Vocational Agriculture, (3) Encourage the use of improved practices taught in class. According to the findings these practices are techniques of prime consideration by the teachers while supervising the farming programs of all-day students on the home farm.

These findings compare very favorable with G. P. Deyoe's[1] contribution on project supervision.

It is important to develop the good will of the parents and gain their cooperation before satisfactory programs of supervised farming can be selected and developed. The home visit furnishes a favorable situation in which the teacher, the boy, and the parents can discuss the program in various stages of its selection and development. The best teaching by our teachers occurs on the job rather than in the classroom, oftentimes during the summer months.

Deyoe's contribution on Practice 3, encourages the use of improved practices taught in class states that:

> "In some cases it may be difficult during the class work to develop sufficient skill and confi-

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[1] Deyoe, Op. Cit., pp. 335-336.

> dence in the boys to go ahead unaided with certain jobs which arise in their farming programs. Sometimes the parents are reluctant to let their boys undertake certain jobs for the first time unless the instructor is there to supervise."[1]

And, finally, Deyoe's view points once again compare favorably with the indications of the representative group of vocational agriculture teachers in that he states that:

> "Records provide data which are useful for the "economic approach" to the teaching of vocational agriculture. Efficient operation of the farm business and farm enterprises is not possible without records and figures to indicate certain trends and outcomes. These data furnish valuable teaching content for the managerial and economic phases of vocational agriculture, including the making of estimates and budgets for projects in supervised farming programs."[2]

Group visitation, conference with individual boys, and providing more effective guidance in selecting and planning a farming program; these practices rank second with a final score of 98.75 each.

These practices were considered important and valuable in which the teacher, together with several students, visits one or more of supervised farming programs to study first hand some of the developments and to become more fully aware of problems in their programs. Conferences with individual boys, this is in reality a part of effective classroom instruction, although the purpose is more definitely that of familiarizing the teacher with recent developments so that he can provide more effective supervision.

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1 & 2 Ibid, p. 336.

The teaching of new skills, helping boys solve new problems which have arisen, and modify previous plans, third place, has been given to teaching of new skills, helping boys solve new problems which have arisen, and modify previous plans.

The first practice makes it possible to take care of individual needs, when the skills were not effectively taught as a part of regular class work. Modifying previous plans gives an opportunity for making necessary adjustments due to unforeseen conditions.

Ranking fourth is: guiding the students into new projects. The home farm furnishes a normal setting for much of this guidance to take place, as the instructor sees the facilities and needs of the home-farm.

Fifth ranked was assisting the boys at "long-range", by telephone or letter. These methods have their limitations, they may have a place under certain conditions. For example, for a situation which demands immediate action and can be settled by rather simple directions.

METHODS OF SCHEDULING SUPERVISORY VISITS

A list of the possible methods of scheduling visits were listed in the questionnaire and given to the teachers included in this study. They were asked to check the method or methods they normally employ. The advantages and disadvantages listed by this group of teachers may indicate the reasons that some

TABLE II

METHODS OF SCHEDULING SUPERVISORY VISITS

PRACTICE USED	Number of Teachers Using	Percent of Teachers Using
1. Unannounced Visits	80	100
2. Student Invitation	80	100
3. Written or Verbal Notice	76	95.0
4. When Critical Points are reached in the Students Farming Program	71	88.75
5. Visit when your time permits	65	81.25
6. Regular Schedule Followed by Teachers, Unknown to Students	48	60.0
7. Parents Invitation	1	1.25
8. Regular Schedule Available to Students	1	1.25

of these methods of scheduling are used more frequently than others, therefore, a check as to the methods used by teachers in scheduling visits, should be of value in determining the last methods of conducting the supervision of the farming programs of all-day students.

METHOD A. Unannounced Visits

Eighty teachers of Vocational Agriculture use the unannounced visits as one of their methods of scheduling project supervision.

There were advantages and disadvantages given for this method of scheduling visits. The list of advantages found in this method are: It tends to keep boys alert in conducting his project or program. It gives a better view of the farming program as it shows conditions as they normally exist. Progress can be easily judged, allowing opportunity to check use of skills taught in class, opportunity to check and grade students project records. The student feels the interest that the instructor has in his program.

Disadvantages listed are: The family is not prepared and ill at ease. Boys could possibly lose interest and let things go. The teacher may overlook mistakes and lose the boys respect when they are passed over. Above all, the boy and parents may not be at home, thus necessitating extra trips.

METHOD B. Student Invitation

There were also eighty teachers reporting the use of student invitation as a method of scheduling visits.

The advantages listed were that the student has a definite need and interest. The fact that the student took the initiative, the teacher can be of greater service. It aids in developing a feeling of cooperation between the student and teacher. The student and parents are ready for the help that the teacher can give. There were also definite disadvantages given to this method. The student invitation may not fit into the teacher's schedule. Students tend to make special preparation before writing the teacher and thus an abnormal situation exist. Some boys do not recognize a need, and thus fail to request help from the teacher at all.

METHOD C. Written or Verbal Notice

Seventy-six of the teachers involved used the written or verbal notices. The advantages given were that the students were at home which saved time and trips on the part of the teacher. Daily records and project record books were in better condition. The parents were prepared for the supervisory call. This made it possible for the teacher to spend more time visiting the project.

Disadvantages listed were: It required more time and effort on the part of the teacher in preparing the notice.

The student tends to prepare for the teachers visit, thus, making it difficult to determine the normal conditions of or interest in the program.

METHOD D. When Critical Points are Reached

Seventy-one of the eighty teachers involved in this study indicated that they scheduled supervisory visits to farming programs when critical points are reached in the students' program.

The advantages to this method are that the teachers are able to make a greater contribution to the students farming program. Advice to make use of improved practices is more effective at critical times. The boys and his parents' interest is higher and supervision is more effective.

Disadvantages discovered in this method are: (1) the teacher is forced to a rigid schedule to prevent missing the critical points in any of the students programs, (2) this method required more time on the part of the teacher, especially when the boy had a large farming program.

METHOD E. Visit When Your Time Permits

Sixty-five of the eighty teachers indicated the use of this method of supervising the students farming program.

This method is convenient for the teacher and permits more visits when used properly.

The disadvantages are: Teachers may not take necessary

time for the supervision of the farming program. There is some tendency to neglect project supervision. The teacher may not visit at the time the boy and his program needs help.

METHOD F. Regular Schedule, Followed by Teacher, Unknown to Students

Sixty percent of the eighty teachers reported that they use a regular schedule for their supervisory visits which is unknown to the student.

This method has a definite advantage in that a project or farming program can be inspected under normal conditions. This method can be made flexible to meet the needs of the student and the teacher.

Disadvantages are: This method produces a routine procedure. The student may be busy with other farms. Problems do not arise according to a fixed schedule. The boy might not be at home on this type of visit.

METHOD G. Parent Invitation

This method appeared in this study to be rarely used in the scheduling of supervisory visits, in that only a small percentage of the teachers reported its use.

Even so, this method has its advantages. Usually, when parents extend an invitation to the teacher there is a definite problem to be solved. The parent feels that the teachers help will be of definite value in the solution of the problem.

This method also has its disadvantages in that the parents may be busy with other jobs on the farm and problems may be overlooked, often reluctant parents overlook critical points of farming programs, thus making this method undependable. The parent may not recognize the need for help.

METHOD H. Regular Schedule Available to Student

A small percentage of the teachers reported the use of the regular schedule available to students.

The advantages given through the use of this method were that projects, project records, and project record books were kept in better condition due to the fact that the student had an opportunity to prepare for the visit in advance. Students and parents were prepared for the visit and ready to ask questions. Other then cases of emergency, the student and parents are at home at time of visit, thus saving time and extra trips.

The disadvantages were that this method does not give the teacher an opportunity to see the project under normal conditions. The teacher found it difficult to keep a rigid schedule. Problems did not arise according to the posted schedule. It did not meet the needs of the individual students. It requires more effort on the part of the teacher in preparing the schedule.

FACTORS THAT DETERMINE THE NUMBER OF VISITS PER BOY, PER YEAR

Table Number III indicates the factors that determine the

number of visits made by agriculture teachers to all-day students, per year.

Eleven possible reasons were listed on the questionnaire used in this study for farming program supervision visits. The teachers were to rate the reason according to the following scale: High = 1; average = 2; low = 3. They were also to indicate the ones they used in determining the number of visits an individual boy's farming program received.

A study of the ranking as shown in Table III shows that the advanced student required more visits. This may be justified by the fact that an advanced student would require more technical advice involving the instructor, especially in degree advancement application.

Students with large farming programs ranked second as a factor to be considered in determining the number of visits per boy, per year. This may be due to the fact that large farming programs involve more problems requiring supervision by the teacher.

Poor parental corporation was ranked third, as a factor in determining visits. This may indicate that more guidance and help is required on the part of the teacher. The parents in this case may not give the full value of his or her experience and promote conditions for a satisfactory farming program.

Poor project opportunities and beginning students ranked fourth as factors in determining the number of visits per boy, per year. The beginning student is classified as boys taking their first year of vocational agriculture. It is a known

FACTORS THAT DETERMINE THE NUMBER OF VISITS YOU MAKE PER BOY PER YEAR

FACTORS CONSIDERED	Number of Teachers Reporting	Percent of Teachers Rating 1	Percent of Teachers Rating 2	Percent of Teachers Rating 3	Percent of Teachers Using
1. Students with large farming program	78	95.	2.5		97.5
2. Good project opportunities require more visits	73	1.25	45.	45.	91.25
3. Advanced students require more visits	79	58.75	40.		98.25
4. Good parental corporation require more visits	63		46.25	32.5	78.75
5. Poor parental corporation require more visits	78	2.6	2.5	92.5	95.5
6. Students needing encouragement require more visits	70	87.5			87.5
7. Poor project opportunities	76	12.5	48.75	33.75	95.
8. Beginning students	76	33.75	32.5	28.75	95.
9. Slow students require more visits	15	7.5	6.25	5.	18.75
10. Students with small farming programs	68	6.25	51.25	27.5	85.
11. Gifted students require more visits	74	6.25	86.25		92.5

fact that boys with poor project opportunities or a beginning student's program would not be developed or expanded as well as advanced students, thereby requiring considerable supervision.

Gifted students, as a factor for consideration in scheduling visits, ranked fifth.

This ranking, given this factor, may be due to good students having the ability to solve many of their problems without requiring the aid of the teacher.

Good project opportunities ranked seventh. The ranking of this factor may be due to a smaller amount of the teacher's time being required to set up a satisfactory farming program.

Students needing encouragement ranked eighth. This factor could apply to all students of vocational agriculture, where conditions exist that are detrimental to the conduct of a good farming program.

Students with small farming programs ranked ninth. This rating may be caused by a student's small farming program presenting fewer problems needing the assistance of the teacher.

Good parental corporation ranked tenth as a factor. This rating may be caused by the teachers feeling that less time was necessary in securing the aid of the parents in the promotion of a satisfactory farming program.

Slow students or students with low ability ranked eleventh and last, but this factor requires consideration because the students may not have the ability to solve his problems with-

out the guidance of the teacher.

AMOUNT OF TIME INVOLVED IN FARMING PROGRAM SUPERVISION

Using the percent of time spent by the teacher in farming program supervision and the total working hours in a year, will give the approximate number of hours spent in supervision. Thus, using the approximate time spent per visit, per boy and the above estimate of time used in supervision, will give an estimate of the number of visits per year per teacher.

The teachers were asked to list the number of boys supervised in a full day in the summer. A Saturday morning, an evening after school and a community service period during the school day. They were also asked to estimate the amount of time they spent on each visit to a crop project, a livestock project, an improvement project and a boy's total farming program.

There seemed to be some variation in the opinion of the teachers as to the per cent of time that should be spent on a supervisory visit. The largest group of teachers used approximately sixty months for each supervisory visit.

The greatest percent of the teachers preferred to visit two or three in an evening after school. Most of the teachers preferred to visit from four to six boys in a full day in the summer.

In cases there was found that there are community services periods included in the vocational agriculture teachers

schedule, ranging from one to two hour periods to visit one to two boys.

On Saturday morning the largest percentage of teachers preferred to visit from one to two boys.

The average number of visits for 80 teachers was ten. This compares favorable with George P. Deyoe.

If we use these figures as guides, we would find that a teacher should spend 20 per cent of his total time on the job for supervision of the farming programs of all-day students. If we use 45 hours as a working week and 52 weeks per year, there would be 2,340 hours available. Of this time, 468 hours would be spent in supervising the farming program of all-day students. If we use 60 minutes as the length of time for the visit, there would be a possibility of 468 supervisory visits per year.

The actual number of individual supervisory visits per boy per year, would depend on the number of boys in the department.

TABLE IV

PERCENTAGE OF TEACHERS MAKING SUPERVISORY VISITS OF DIFFERENT LENGTHS BY TYPES OF PROJECTS

TYPE OF PROJECT	LENGTH OF VISITS IN MINUTES							
	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100 & Over
LIVESTOCK PROJECT	21.25	21.25	3.75	43.75		1.25	2.5	
A CROP PROJECT		56.25		60	3.7		2.5	
IMPROVEMENT PROJECT	5	32.5		56.2			2.5	1.25
BOY'S TOTAL FARMING PRO-GRAM	7.5	5		67.5		1.25	7.5	10

TABLE V

THE DISTRIBUTION OF TEACHERS IN PERCENTAGE ACCORDING TO THE TIME OF VISIT AND THE NUMBER OF STUDENTS SUPERVISED PER TRIP

VISITATION CHARACTERISTIC	NUMBER OF BOYS SUPERVISED					
	1	2	3	4	5	6
AN EVENING AFTER SCHOOL		56.25	43.75			
A FULL DAY IN THE SUMMER		2.5	3.75	31.25	3.75	18.75
A SATURDAY MORNING	5	8.25	1.25			
COMMUNITY SERVICE PERIOD DURING THE SCHOOL DAY	55	42.5				

TIME OF DAY CONSIDERED BEST FOR FARMING PROGRAM SUPERVISION

To find the time of day that the teacher preferred for project supervision would be of some value in helping determine the period of day to be alloted for farming program supervision. The choice of time during the school year may vary from that preferred in the summer months.

First and second choice were to be indicated on the period of the day which the teacher preferred for the supervision of farm projects. In the questionnaire, project supervision during the school year and summer months were listed separately.

Forty-four of the eighty teachers gave first choice to the morning hours from 7:00 a.m. to 10:00 a.m., for the supervision of the farming program of all-day students during the summer months. Sixty-two of the teachers gave first choice to the afternoon hours from 1:00 p.m. to 4:00 p.m. Fifty-nine checked the evening period from 4:00 p.m. to 7:00 p.m., as first choice. As you may see, a large percentage of these teachers checked more than one of the four periods as to first choice, which indicated that they gave them an equal rating. None of the teachers preferred the noon period as first choice, however, the survey indicated that thirty-nine of the eighty teachers checked the noon period from 10:00 a.m. to 1:00 p.m., as second choice. Twenty-two chose the afternoon as a second choice. Twenty-two teachers chose the evening period as a second choice.

Some of the teachers commented that they preferred the

TABLE VII

TIME OF DAY PREFERRED DURING THE SCHOOL YEAR
FOR THE SUPERVISION OF FARMING PROGRAMS

TIME OF DAY	FIRST CHOICE		SECOND CHOICE	
	Number of Teachers Checking	Percent of Teachers Checking	Number of Teachers Checking	Percent of Teachers Checking
MORNING BEFORE SCHOOL			6	7.5
NOON HOUR			3	3.7
EVENING AFTER SCHOOL	74	92.5	6	7.5
SATURDAY MORNING	68	85.	9	11.5

TABLE VIII

TIME OF DAY PREFERRED DURING THE SUMMER FOR THE SUPERVISION OF FARMING PROGRAMS

TIME OF DAY	FIRST CHOICE		SECOND CHOICE	
	Number of Teachers Checking	Percent of Teachers Checking	Number of Teachers Checking	Percent of Teachers Checking
MORNING 7:00-10:00	44	55.	30	37.5
NOON 10:00-1:00			39	48.75
AFTERNOON 1:00-4:00	62	77.5	22	27.5
EVENING 4:00-7:00	59	73.75	22	27.5

noon period and the evening period, because the students were more likely to be at home for lunch or at the end of a working day.

During the school year, seventy-four of the eighty teachers gave first choice to the period in the evening after school for the supervision of the farming program of all-day students.

Sixty-eight teachers also checked Saturday morning as their first choice, there again, a large percentage of the teachers checked more than one of the four periods as their first choice, which indicated that they gave them an equal rating.

As a second choice during the school year, six teachers checked morning before school for their supervisory visit. Three checked the noon period as a second choice. Six teachers gave the evening after school as their second choice. Nine teachers indicated that they preferred Saturday morning as their second choice.

None of the teachers involved in this study preferred the morning before school or the noon hour as first choices for their supervisory work.

PREPARATION MADE AND REFERENCE MATERIAL REVIEWED OR CARRIED WHILE CONDUCTING FARMING SUPERVISION

Seventy-one of the eighty teachers indicated that they made some preparation in regard to reviewing technical or other material before arriving at the home of the boy. Nine teachers made no preparation before going to the boy's home.

The preparation made by the teachers before conducting the supervisory visit should give some indication as to the proper preparation for project supervision.

In no case did any teacher indicate that any material was reviewed on the field where a lack of information was felt, the material, where necessary, was reviewed before the teacher left the station. This data was included in the questionnaire in the form of questions. It included material reviewed before the trip, equipment carried while on the trip.

TABLE IX

TECHNICAL MATERIAL REVIEWED BEFORE CONDUCTING FARMING PROGRAM SUPERVISION

TECHNICAL MATERIAL REVIEWED	NUMBER OF TEACHERS MAKING PREPARATION
Livestock Feeding	15
Parasite and Disease Control for Crops and Livestock	11
Fertilizer Recommendation	10
Feed and Labor Cost	9
Government Production Control Program	6
Current Farm Prices	5
Crop Problems	4
Marketing Information	4
Machinery and Equipment Problems	3
Experiment Station Data	2
Crop and Pasture	1
Record Book Guide	1

The type of material reviewed varied, but in general, covered anticipated problems in the projects to be supervised. The material listed by the teachers included current Live-

stock feeding, problems and their solutions, field crop and pasture bulletins. The list also included parasite and disease control problems for both livestock and crops. Records of the boys' farming programs, and records of previous supervision. Feed and labor cost, government production control program, current farm prices, fertilizer recommendations, and official record keeping guides.

EQUIPMENT CARRIED BY THE TEACHER WHILE CONDUCTING SUPERVISORY VISITS

A list of equipment normally carried by the teachers involved in this study could be of value to other teachers of vocational agriculture in choosing the proper equipment to be carried while supervising the farming programs of all-day students.

The teachers were asked to list the items they normally carry while supervising the farming programs, particular emphasis being given the items they used most frequently.

TABLE X

EQUIPMENT CARRIED BY THE TEACHER
WHILE CONDUCTING SUPERVISORY VISITS

ITEM	NUMBER OF TEACHERS REPORTING
Vaccinating syringes and needles	77
Worming equipment and medicines	49
Castrating knife and related equipment	47
Pruning equipment	47
Mastitis cards	41
Soil test equipment	38
Dehorning equipment	36
Feed additives	16
Livestock spray and Dust materials	16
Crop spray and dust materials	11

The items carried by the teachers appeared to be those items of equipment not easily found on the home farm.

The equipment most frequently listed as being carried by the teachers were vaccinating syringes and needles. They

could be used for the control of diseases of swine, cattle and dogs.

Most of the equipment carried included items which promoted the use of improved practices.

TABLE XI

REFERENCE MATERIAL CARRIED DURING THE SUPERVISION OF THE FARMING PROGRAMS

REFERENCE MATERIAL	NUMBER OF TEACHERS REPORTING
Parasite and Disease Control for Crops and Livestock	76
Current Feeding Practice Bulletins	71
Crop and Pasture Bulletins	71
Feed and Labor Cost	65
Current Marketing Information	65
Fertilizer Recommendations	62
General Livestock Bulletins	48

Seventy-six of the teachers indicated that they carry reference materials.

The information covered in the reference material which they carried included parasite and disease control, bulletins for crops and livestock, livestock feeding bulletins, fertilizer recommendations for crops and pastures, current feed and labor cost, current market prices.

INFORMATION COVERED AND USE MADE OF RECORDS KEPT ON SUPERVISION OF FARMING PROGRAMS

A list of the items included in the records kept by the teachers on farming program supervision and the use made of this information could be an aid in setting up project supervision records.

The teachers were asked to list the items included in the records and the use made of them. They were to submit samples of these records.

A large number of the teachers responded to this request by including a form that is executed upon the completion of each supervisory visit, others responded with similar forms, but requiring less information. Eighty teachers indicated that they keep a record of supervision of the farming program of all-day students. The types of records kept and the contents varied.

TABLE XII

ITEMS INCLUDED IN RECORDS OF FARM PROGRAM SUPERVISION

ITEM	NUMBER OF TEACHERS REPORTING
Name of Student	80
Date of Visitation	80
Persons Contacted	66
Name and Scope of Production Projects	66
Condition of Production Projects	66
Name and Scope of Improvements Projects	66
Supplementary Practices Completed Since Last Visit	66
Approved Practices Completed Since Last Visit	66
Condition of Project Record Book	80
Age of Boy	80
Year in School	80
Recommendations	80

There were six items that appeared common to all of the records. They were: The name of the boy, date of visitation, condition of project record book, age of boy, year in school

and recommendations made by the teacher.

TABLE XIII

USES MADE OF RECORDS KEPT ON FARMING PROGRAMS

ITEM	NUMBER OF TEACHERS REPORTING
To determine the progress of the boy	80
Planning future farming programs	77
To determine next visit	77
Classroom problems and illustrations	66
Farm shop jobs	66
To determine students grade	43
For project summary and teaching material	38

In the list of uses made of records kept on farming programs of all-day students were: To determine the progress of the boy, planning future farming programs, determine the next visit.

All uses may be termed as follow-up work.

TABLE XIV

MAJOR DIFFICULTIES ENCOUNTERED IN SUPERVISING FARMING PROGRAMS

ITEMS	NUMBER OF TEACHERS REPORTING
Government control of cash crops	13
Lack of interest on part of parents	12
Lack of interest on part of boy	10
Lack of financial support on part of parents	10
Lack of home ownership	8
Poor management on part of parents and boy	8
Boy or parents not at home	7
Parents object to change of practices	5

Table XIV presents a breakdown in some of the major difficulties listed by the teachers of agriculture involved in this study. It is significant to observe that the absence of available land for the boy's use, crop and pasture, interest on the part of the parents and the boy, lack of home ownership entered the picture, as indicated, the problem of finance has been encountered by these teachers.

It must be observed that teachers are faced with the pro-

blems of not finding boys or parents at home at the time of his visit and parents objecting to change their farm practices.

Some of the teachers suggested that the supervisory visits should be made with a definite purpose in mind. Farming program supervision should be given more time. Through these visits, the interest of the teacher is reflected and it helps to develop the interest of the boy and parents. Belief was expressed that more and better use could be made of the project record book.

The boy should be given a definite grade after each visit to give him an understanding as to his progress. A challenging program should be outlined at the close of each visit.

As was stated in the introduction of this study, no attempt has been made on the part of the writer to play up any weaknesses on the part of the teachers of Vocational Agriculture participating in the conduct of this study, or other teachers engaged in the teaching of Vocational Agriculture, but rather to isolate certain techniques contributing to the Supervision of Farming Programs in Vocational Agriculture.

Chapter III

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

SUMMARY

The aim of this study has been to isolate effective techniques for supervision of instruction in Vocational Agriculture, and the extent to which these factors have affected the farming programs supervised by the teachers of Vocational Agriculture in Areas I, II, and III.

It was found that practices used to supervise the farming programs of all-day students ranked in the following manner:

1. Develop a working relationship between the boy, parents and teacher.
2. Check students' project record book.
3. Encourage the use of improved practices taught in class.
4. Provide more effective guidance in selecting and planning a farming program.
5. Group visitation.
6. Conference with individual boys.
7. Teach new skills.
8. Help boy solve new problems which have arisen.
9. Assist the boy at long-range, by telephone or letter.
10. Guide the student into new projects.

The methods used by the teachers included in this study in scheduling supervisory visits are as follows:

1. Unannounced visit.
2. Student invitation.
3. Give student written or verbal notice.
4. When critical points are reached in the boy's farming program.
5. Visit when your time permits.
6. Regular schedule followed by teacher, unknown to students.
7. Parents invitation.
8. Regular schedule available to students.

Factors considered most important as possible causes for more supervisory visits were:

1. The advanced student
2. Student with large farming program
3. Poor parental cooperation
4. Beginning students
5. Poor project opportunities
6. Gifted students

It was found that the teachers make approximately ten visits to each boy per year, spending sixty minutes per visit, thus spending approximately 20 per cent of his total time supervising the farming programs of all-day students.

The material reviewed before conducting supervisory visits and the material carried were closely related. The most important subject matter reviewed and carried were bulletins on parasite and disease control for crops and livestock feeding.

Equipment most frequently listed as being carried was

vacinnating syringes and needles.

Most of the equipment carried included items which were not usually found on the home farm, yet they promote the use of improved practices.

There appeared to be little difference in the choice of time for supervision between early morning, afternoon or evenings in the summer, but none preferred the noon period as a first choice.

The time of day preferred for supervision during the school term was in the evening immediately following school.

Six items most commonly found in all of the records by the teachers in supervision of the farming programs were:

1. Name of the student
2. Date of visitation
3. Condition of project record book
4. Boys year in school
5. Person contacted
6. Recommendations

The use made of the records appeared to be mainly for determining the following:

1. Progress of the boy
2. Planning future farming programs
3. Next visit

Major difficulties were found to have considerable affect on the effective supervision of farming programs. In the order of their importance, these difficulties ranked as follows:

1. Government control of cash crops
2. Lack of interest on the part of parents
3. Lack of interest on the part of the boy
4. Lack of financial support of parents
5. Lack of home ownership
6. Poor management

Tabulations from the data collected showed all difficulties encountered in supervising the farming programs, were closely associated with these areas: facilities, finance, interest and management.

CONCLUSIONS

In the light of this study and information revealed from the eighty selected teachers of Vocational Agriculture in Texas, the following conclusions were drawn:

1. A working relationship between the boy, parents, and teacher must exist if interest is to be maintained and farming experience is to be meaningful.

2. Teachers of Vocational Agriculture have the responsibility of leading students to make better use of the student's project record book.

3. That teachers of vocational agriculture should encourage the use of improved practices taught in class.

4. The scheduling of visits may be announced or unannounced. The time of day should be suited to all concerned for best results.

5. That in order for advanced students to be able to advance to higher degrees, extra supervision is needed; students with large farming programs and poor parental cooperation also need extra supervision.

6. That technical material covering anticipated problems to be encountered should be reviewed before making supervisory visits.

7. It is desirable that records be kept of supervisory visits, and that these records be used to serve as background for classroom problems.

8. It is necessary to carry items of equipment and materials which promote improved practices when making supervisory visits.

9. The major difficulties encountered in farming programs supervision appeared to deal with government control of cash crops and the lack of interest and proper attitude on the part of the parent and the boy.

RECOMMENDATIONS

There is evidence that there is still a need for pioneering in practices which will improve the quality of the farming programs of all-day students in Vocational Agriculture. Much of this responsibility lies with the teachers of Vocational Agriculture if these quality programs are to materialize. In order that teachers may make a greater contribution, the following specific recommendations are offered for the consideration of the teachers of Vocational Agriculture to improve the supervision of the farming program of all-day students on the home farm:

1. That improved relationship between students, parents and teachers be brought about through visits, to prospective students also, meetings, discussions, and any other feasible medium.

2. That improved practices taught in class be executed beyond the walls of the classroom.

3. That the teacher regularly check the students project record books to aid in determining the weaknesses in the farming programs and suggest improvements.

4. That the progress of the students farming programs be measured not only in terms of monetary values, but in the total development of all the students enrolled in classes of Vocational Agriculture.

5. That assistance be given to help develop new skills necessary to the boys farming program that were not effectively taught in the classroom.

6. That the teachers exhibit a greater degree of interest through making timely visitations, through familiarizing himself with the boys farming programs enough to know the dates when critical points are reached. A long range notice,or

telephone, given during the summer months and a verbal or written notice given during the months of regular school.

7. To determine conditions as they exist under a normal situation, the unannounced visit should be made.

8. That extra visits be made to the advanced student or student with the advanced program, to guide him into degree advancement, and other Local, State and National awards.

9. That a large farming program receive sufficient visits to cover the critical periods.

10. That extra visits should be made to educate the parents as to the aims and purposes of the boys farming program, especially when poor parental cooperation or attitude exists.

11. That the teacher make a minimum of ten visits per boy per year. That he spend a minimum of 20 percent of his total teaching time in the supervision of the farming program with an average of a minimum of 60 minutes per visit.

12. That the hours after school and Saturday morning be used in the supervision of the Farming Program during the school term. Early morning and late afternoon hours be used during the summer months to supervise the farming program.

13. That technical material covering problems that may be encountered in the supervision of farming programs should be reviewed before arriving at the point of visitation.

14. That the teacher carry vaccinating syringes and other pieces of equipment which promise improved practices and are not likely to be found on the home farm.

15. That a record of each supervisory visit be kept and include such information as boy's name, date of visit, kind of projects, jobs completed since last visit, and recommendations made by the teacher.

16. That teachers take into consideration individual differences and similarities in interests, needs, and capacities of students they teach.

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A P P E N D I X

BIOGRAPHY

NATIVITY: The writer was born April 27, 1925, and is the second child of three children born to Mr. and Mrs. Earl Wooten Sr. of Lovelady, Texas.

TRAINING: He completed his elementary education in a three-teacher school in the Holly School District, Lovelady, Texas, and his high school training at Crockett High School, Crockett, Texas, graduating in May, 1941. After completing two years of training at Mary Allen Jr. College, Crockett, Texas, the writer entered Prairie View College in September, 1943 and in early October, 1943, entered the United States Air Force and served two years and nine months. In September, 1946, the writer re-entered Prairie View Agricultural and Mechanical College and received a Bachelor of Science Degree in Agricultural Education, August, 1948.

EXPERIENCE: All of the writer's professional experience has been in the public schools of Texas. One year as social science teacher and basketball coach, Green Bay High School, Palestine, Texas. Vocational Agriculture on 100 percent basis in the following schools:

1. Central High School, Troup, Texas. Eight years; August 1, 1949 - June 30, 1957.
2. Center Grove High School, Lovelady, Texas. Eight years; July 1, 1957.

The writer is presently employed as Vocational Agriculture teacher at Center Grove High School, Lovelady, Texas.

EFFECTIVE TECHNIQUES FOR SUPERVISION OF INSTRUCTION IN VOCATIONAL AGRICULTURE

QUESTIONNAIRE

NAME _____ SCHOOL _____

ADDRESS _____

I. What procedures do you use in supervising the farming programs of all-day students on the home farm? Please list and/or check as you use them.

II. Check the list of practices you use in project supervision on the home farm. If you use a practice indicate with a check in the "Check Columns". Rate the practices according to the value of effectiveness in project supervision. Use the following scale:

1. High 2. Average 3. Low

If you rate a practice "High" place 1 in the rating column. If you rate the practice "Average" or "Low" indicate with 2 or 3 as the case may be in the rating column.

CHECK	RATING		
_____	_____	(a)	Group visitation in which the teacher, together with several students, visit one or more programs of supervised farming.
_____	_____	(b)	Conference with individual boys, small groups or entire classes.
_____	_____	(c)	Check students Project Record Book.
_____	_____	(d)	Assist the boys at "Long Range" by telephone or letter.
_____	_____	(e)	Develop a working relationship between the boy, parents and teacher.
_____	_____	(f)	Teach new skills.
_____	_____	(g)	Encourage the use of improved practices taught in class.
_____	_____	(h)	Provide more effective guidance in selecting and planning a farming program.
_____	_____	(i)	Guide the students into new projects.

II. Cont'd

_____ _____ (j) Help boy solve new problems which have arisen and make modifications in his plans.

_____ _____ (k) Others, Specify _____

_____ _____ (l) _____

III. How and when do you schedule visits? Check as many as you use.

CHECK

_____ (a) Visit when your time permits.

_____ (b) Unannounced visits.

_____ (c) Student invitation.

_____ (d) Parent invitation.

_____ (e) Regular schedule followed by teacher, unknown to student.

_____ (f) Written or verbal notice.

_____ (g) When critical points are reached in a boy's farming program.

_____ (h) Regular schedule available to students.

_____ (i) Others, Specify _____.

_____ (j) _____.

IV. What determines the number of visits you make per boy, per year? Check and rate the ones according to the importance, using the following scale:

1. High 2. Average 3. Low

If you rate a practice "High" place 1 in the rating column, if you rate the practice "Average" or "Low" indicate with 2 or 3 as the case may be in the rating column.

CHECK RATING

_____ _____ (a) Good project opportunities require more visits.

_____ _____ (b) Poor project opportunities require more visits.

_____ _____ (c) Students with large farming programs require more visits.

_____ _____ (d) Students with small farming programs require more visits.

_____ _____ (e) Advanced students require more visits.

_____ _____ (f) Beginning students require more visits.

_____ _____ (g) Good parental cooperation require more visits.

_____ _____ (h) Poor parental cooperation require more visits.

_____ _____ (i) Gifted students require more visits.

_____ _____ (j) Slow students require more visits.

_____ _____ (k) Students needing encouragement require more visits.

_____ _____ (l) Others (Specify)_____.

_____ _____ (m) _____.

V. Normally, How many boys do you visit in:

_____(a) An evening after school.

_____(b) A full day during the summer.

_____(c) A Saturday morning.

_____(d) Community service period during the school day.

_____(e) Others (Specify) _____.

_____(f) _____.

VI. What time of day do you consider best for project supervision? List first and second choices:

During School Term	During the Summer
_____(a) Morning	_____(a) Morning

VI. Cont'd.

_____(b) Noon	_____(b) Noon
_____(c) Evening	_____(c) Evening
_____(d) Afternoon	_____(d) Afternoon
_____(e) Saturday Morning	_____(e) Saturday Morning

VII. Normally, how much time do you spend on each visit on: Indicate average time in terms of minutes.

_____ (a) A livestock project.

_____ (b) A crop project.

_____ (c) Improvement project.

_____ (d) A boy's total farming program.

VIII. If necessary, when do you review technical or other material?

_____ (a) Before arriving at the home of the boy.

_____(b) In field where you feel a lack of information.

_____(c) Others, (Specify)_____.

_____(d) _____.

IX. If reference material, tools and equipment are carried on project supervisory visits, indicate below.

_____ (a) Handbook.

_____ (b) Textbook.

_____ (c) Bulletins.

_____ (d) Others (Specify) _____.

_____ (e) _____.

_____ (f) Scales.

IX. Cont'd

_____ (g) Syringes and needles.

_____ (h) Castrating equipment.

_____ (i) Soil sampling equipment.

_____ (j) Pruning equipment.

_____ (k) Others (Specify) _____

X. Check major difficulties you encounter in project supervision:

_____(a) Parasites and disease controls for crops and livestock.

_____(b) Boy's farming program.

_____(c) Livestock feeding.

_____(d) Feed and labor cost.

_____(e) Fertilizer recommendations.

_____(f) Parents attitude.

_____(g) Current farm prices.

_____(h) Machinery and equipment problem.

_____(i) Government production control problem.

_____(j) Marketing information.

_____(k) Others (Specify)_____.

XI. Do you normally take boys with you when visiting projects after school? _____.

2. How many supervisory visits do you normally make per boy per year? _____.

3. Do you keep a record of your project supervision? _____.

4. If a record is kept of project supervision, how do you make use of the record? _____

_____

LIST OF TABLES