



The supervised practice program in vocational agriculture in Montana
by Hubert E Rodeberg

A THESIS Submitted to the Graduate Committee in partial fulfillment of the requirements for the degree of Master of Science in Agricultural Education.

Montana State University

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Abstract:

This study of supervised practice in agriculture was conducted in order to discover the factors which lead to better farm practice programs. A survey of thirty-three vocational agriculture departments within the State was made, using data contributed by the instructors and the reports on file in the State department of Vocational Agricultural Education. These thirty-three departments were rated as superior, average, or poor according to the efficiency of their supervised farm practice program.

The study reveals the characteristics of the vocational agriculture program, the results of supervised farming, the instructor's philosophy toward vocational agriculture* the procedures used by instructors in launching boys in practice programs, and the purpose and aim of supervision. Comparisons were made between the superior and poor groups of instructors as to practices and policies employed in launching their programs* Poor practices were used by both groups* The superior group used a number of procedures which are believed to account in part for the superior results* Some methods for improving the supervised practice program are recommended. These include a more careful selection of instructors* assistance from State authorities in drawing up a course of study for the particular locality, and more constructive supervision of the entire program. A form has been devised for evaluating the supervised practice program based on results attained over a long-time period* The use of such reports as are now available would provide valuable material for further research in supervised farming as well as in other phases of agricultural education.

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AGRICULTURE IN MONTANA

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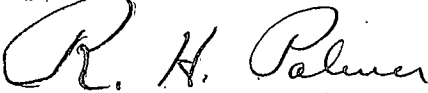
for the degree of

Master of Science in Agricultural Education

at

Montana State College

Approved:



In Charge of Major Work



Chairman, Examining Committee

Chairman, Graduate Committee

Bozeman, Montana
May, 1942

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FOREWORD

"Agriculture is an art which will enrich those who diligently practice it, provided they understand it; but if they do not understand it, it matters not how hard they may labor at it, it leaves them in poverty."

--Xenophon

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ABSTRACT

This study of supervised practice in agriculture was conducted in order to discover the factors which lead to better farm practice programs.

A survey of thirty-three vocational agriculture departments within the State was made, using data contributed by the instructors and the reports on file in the State Department of Vocational Agricultural Education. These thirty-three departments were rated as superior, average, or poor according to the efficiency of their supervised farm practice program.

The study reveals the characteristics of the vocational agriculture program, the results of supervised farming, the instructor's philosophy toward vocational agriculture, the procedures used by instructors in launching boys in practice programs, and the purpose and aim of supervision. Comparisons were made between the superior and poor groups of instructors as to practices and policies employed in launching their programs. Poor practices were used by both groups. The superior group used a number of procedures which are believed to account in part for the superior results.

Some methods for improving the supervised practice program are recommended. These include a more careful selection of instructors, assistance from State authorities in drawing up a course of study for the particular locality, and more constructive supervision of the entire program. A form has been devised for evaluating the supervised practice program based on results attained over a long-time period.

The use of such reports as are now available would provide valuable material for further research in supervised farming as well as in other phases of agricultural education.

PART I. INTRODUCTION

The purpose of this study is to discover specific teacher procedures which are effective in getting vocational agriculture students started in an adequate program of supervised practice. In this study the characteristics of supervised practice programs will be analyzed, a method of evaluating them will be developed, and recommendations made for future improvements.

The aim of vocational agriculture is "to train present and prospective farmers for proficiency in farming." 1/ The first specific objective in the attainment of this aim is to make a beginning and to advance in farming. Training is given in the production of plants and animals, in the use of machinery and mechanical devices, in the activities involved in marketing, in the procedures of farm management and finance, and in the conservation of soil and other natural resources.

Supervised farm practice is an important phase of this program, since it is the chief means by which the training is brought to the doing level in a real-life occupational setting.

Supervised farm practice has been employed for many years in schools giving farmer training. In Massachusetts, at the beginning of the century, a program including "home projects" was developed with rural high school students of agriculture mainly under the leadership of Rufus J. Stimson of the Massachusetts State Board of Education. With the spread of courses in general agriculture throughout the country, many efforts were made to get

1/ "Educational Objectives in Vocational Agriculture", Bulletin No. 21, 1940 U.S. Office of Education, Washington, D. C.

students to carry the instruction of the classroom into practice with a small farm enterprise of their own--a pig, a few chickens a calf, a berry patch, etc. This was the beginning of the program now termed supervised farm practice in the United States. There were numerous county agricultural high schools in many states of the Union, notably Minnesota, Wisconsin, North Dakota, which had some facilities for farm practice under direction of the teachers in the school. Some time around 1910, these high schools flourished at their height, and about this time the students were encouraged to carry on some sort of farm practice at their homes during the summers. Often these farm practices were in the nature of general improvements rather than home projects owned and managed by the student. This development has also contributed to the present program of supervised farm practice.

These forms of supervised practice were given further emphasis after the passage of the Smith-Hughes Act in 1917. This Congressional act appropriating money to stimulate the teaching of vocational subjects specified that training in agriculture must be supplemented by "at least six months of directed or supervised farm practice". The home farm improvement program was stimulated somewhat by regulations sponsored by the Federal Board for Vocational Education in which the farm student kept a complete and detailed record of all transactions taking place in the home farm business. These records were often made the basis for the instruction given in the school. The home project was not directly sponsored nor even readily approved by the Federal Board for Vocational Education in its early years. However, the movement toward home projects

gained considerable headway among certain supervisors and teacher trainers, notably in the States of Illinois and Massachusetts, and among many able teachers who recognized it as a valuable teaching device. By 1922, the home project was recognized as the most desirable form of farm practice, while home farm improvement received little emphasis from leaders in the field and little application by instructors or students generally. By 1930, the Federal Board had approved four types of supervised practice: (1) placement for farm experience, (2) a program of supplementary farm skills, (3) improvement projects or home farm improvement programs, and (4) the ownership project or "home project".

During the next ten years, leaders in the field--local teachers, supervisors, and specialists in the Office of Education--began to realize that a suitable combination of several of these forms of supervised practice was most desirable for the majority of farm students. An individual farming program under ideal conditions would include several ownership projects planned over a period of years, a program of improvement projects for the home farm, farm skills, and occasional placement for farm experience. Such a program would give a boy considerable investment in livestock, seed, machinery and equipment, and some cash by the time he had finished a four-year all-day course. It would give him managerial and manipulative experience needed in the occupation and shorten the period during which he must work as a farm hand or an unrecognized partner in the business of the home farm.

In more recent years, improved methods of farm practice have been developed by many able teachers in various parts of the country. In

recent years, there has been a revival of the school farm and of group productive enterprises carried on directly under the supervision of the instructor, similar to the program of the early county agricultural high schools. Home farm mechanics and farm engineering projects as an essential phase of the farmer training program have been recent developments.

A survey of state plans and regulations from various states indicates that there is still a lack of unified thinking as to the nature of these programs in supervised practice and greater variance still in the teacher procedures recommended for carrying them out. The States of New Hampshire, Minnesota, Oregon, Iowa, Texas, and other states have attempted to pioneer in certain procedures which would place emphasis upon one or more of these forms of supervised practice. The State of Texas once had a supervisor's regulation that each boy must carry three home projects, which promptly broke down because it was not feasible. A former state supervisor in the State of Montana recommended a program of home farm improvement which was based on poor psychology and resulted in considerable confusion and negligible results. It had become evident by 1940 that certain objectives were desirable but there was no evidence that the procedures for handling groups were efficient. The extent to which emphasis should be placed on various phases of the program has not been determined. Such a weakness was pointed out in the report of the President's Advisory Committee (the so-called Reeves Committee) ^{2/} which held that methods of evaluating results had not been developed.

Partly as a result of the report of the Reeves Committee and because there was a previously recognized need for evaluation studies, a Committee

^{2/} Advisory Committee on Education - Report of the Committee, February, 1938, Superintendent of Documents, Washington, D. C.

of the American Vocational Association, assisted by specialists from the Office of Education, attempted a research project in evaluation which would cover ten per cent of the vocational agriculture departments in the United States. This evaluation attempted to measure results both by factual data as to outcomes, and by determining procedures and practices used by teachers in various phases of the farmer training program. Since publication of early results of this research study (which is not yet complete), the form for evaluation has been severely criticized as to method by many leaders in the field. It is questionable whether this first study will give a sound means of evaluation of results or justification for certain specific procedures commonly used. This holds true for supervised practice.

Methods of evaluation of farm practice programs for local school departments and for specific individuals in training have not been worked out satisfactorily. They are needed by instructors, supervisors, and teacher trainers.

Very little study has been made of practices and procedures used by instructors in launching and supervising the home farm project program for boys. Since more definite objectives have gradually evolved, authorities believe that our next step in investigation in agricultural education is in the evaluation of results and perfection of techniques for obtaining desirable ends.

Definitions of Terms Used

The definition of the types of supervised practice will be those used by the State Department of Agricultural Education in Montana.

Productive Enterprise. A business venture for profit usually limited to a production cycle in a farm enterprise.

Improvement Project. A project intended to increase appreciably the real estate value of the farm, or to improve the efficiency of the farming business. It is usually of greater scope than either a "job" or an "improved practice", for example, improving the swine enterprise, beautifying the farmstead, or keeping a set of farm records.

Supplementary Farm Practice. Practice which has as its purpose the development of ability in certain jobs and practices carefully selected by the teacher in conference with the student. These jobs or practices are more restricted in scope than improvement projects, for example, culling the poultry flock, treating wheat for smut, or dipping sheep.

Placement for Farm Experience. Placement on a farm of a student who is lacking in farm experience, or transfer of a student who has too limited facilities on his home farm to a suitable farm. The placement of such students on farms and the follow-up of their programs on these farms is one responsibility of the teacher of agriculture.

Class Project. That project conducted by the entire class in vocational agriculture for developing managerial and financial responsibility as well as production.

Group Project. That project conducted cooperatively by two or more boys. They may arrange to share expenses and then to divide the profits.

PART II. REVIEW OF LITERATURE

Much of the literature of vocational agriculture has been devoted to supervised farm practice. This section reviews briefly the policies of federal and state agencies, the legislative provisions, the opinions of authorities, and the results of pertinent investigations of supervised farming programs. The major objectives of vocational education in agriculture as drawn up by a committee from the American Vocational Association and the Federal Board for Vocational Education in September, 1929, are:

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

In agricultural education programs, the development of abilities depends upon individuals having real situations on the farm in order to develop sound judgment and clear cut modes of action. The attainment of the objectives requires that there be a definite relationship between the course of study and the supervised farming program of individuals. The individual supervised farming program is recognized as the best method for training the students in the practices and procedures of the many farm jobs related to the specific farm enterprise.

Federal authorities in charge of the administration of vocational education in agriculture have listed some additional principles underlying effective supervision for boys enrolled in vocational agriculture classes. 3/

1. There must be a definite coordination of the supervised practice and the instruction in the classroom.

2. The supervised practice should be of such a nature as will allow it to be coordinated with the supervised practice of succeeding years.

3. The supervised practice should be of such a nature as will open a field for the study of new problems.

4. The supervised practice should be of such a scope and nature as will enable the pupil to secure experience in management, marketing, financing, farm bookkeeping, and manipulative skills.

5. The supervised practice should offer good prospects for financial return.

6. The supervised practice should be selected for the first year on such a basis as will permit its being continued throughout the entire vocational experience of the pupil. This does not mean the pupil should not start anything new the second year or in succeeding years, but that the work started each year should be continued in the succeeding years. This applies particularly to ownership projects.

7. The supervised practice should be so conducted that at the conclusion of the school work, the ex-pupil will continue from the level of accomplishment which was reached as a vocational agriculture pupil.

3/ Supervised Farm Practice Planning, Bulletin 163, U.S. Office of Education, Washington, D. C., June, 1932.

8. The supervised practice should include work with one or more of the major enterprises in the farming occupation which the pupil expects to enter.

Legislation

The National Vocational Education (Smith-Hughes) Act was passed and approved February 23, 1917. 4/ It provided federal funds to be used for the betterment and advancement of training in agriculture in secondary schools, and provided that schools meeting certain standards and qualifications for work should be reimbursed for part of the instructor's salary. Its purpose was to educate youth for useful employment. The education should be less than college grade, and it should be designed to meet the needs of persons over fourteen years of age who have entered or who are preparing to enter farming. It was designed especially to provide practical education for the students who want agricultural training in addition to their academic courses.

Supplementary to the Smith-Hughes Act was the George-Reed Act, 5/ covering a period of five years, 1929 to 1934, which provided for the further development of vocational education in the states and territories by increasing the appropriation for agricultural education.

The George-Ellsey Act, 6/ which was also a supplementary law, covered a period of three years from 1934 to 1937, and furthered the development of vocational education in the states and territories.

4/ Public No. 347 Sixty-fourth Congress S. 703

5/ Public No. 702 Seventieth Congress S. 173

6/ Public No. 245 Seventy-second Congress H.R. 7059

Due to the increasing demand felt for vocational agricultural training in the United States and her Territories, the George-Deen Act of June 8, 1936,^{7/} provided for the further development of vocational education in the several states and territories and also provided for the appropriation of the sum of 12 million dollars for the fiscal year beginning July 1, 1937, and the same amount annually thereafter; it provided that the several states and territories shall be required to match from state or local funds or both 50 per cent of this appropriation, and match an additional 10 per cent of this amount each year until June 30, 1946, and annually thereafter 100 per cent.

Because of its comparative newness, the program in vocational agriculture is not generally well understood except in communities where the work has been carried on successfully for several years. One phase of the vocational agricultural program which is little understood by the people is the supervised farming practice. The aim of this farm program is to put into practice fundamental farming principles. The Smith-Hughes Act made definite provisions for this part of the program. Section 10 of the act reads, "..... that such schools 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." Therefore, in order to meet the requirements of the Act, each student must carry on supervised practice upon a farm, covering a period of at least six months of each year.

The Montana plan for Vocational Agricultural Education states ^{8/} . . .

^{7/} Public No. 673 Seventy-fourth Congress, H.R. 12120

^{8/} "Vocational Education Manual for Montana--State Plans for Vocational Education." Department of Public Instruction, Helena, Montana, 1937-1942, p.34.

"that the most satisfactory supervised farming activities are those which are conducted on the home farm." These activities will offer experience in the occupation, under the conditions of the occupation, and will be on a constantly expanding basis, which points definitely toward establishment in farming at the conclusion of the systematic instruction in vocational agriculture.

Authorities and Investigations

Present concepts of the authorities and investigators on complete supervised farming programs show the necessity for relationship between the programs and subsequent placement. Investigations of supervised farming have been made in several states and have dealt primarily with the relationship between the supervised farming programs and placement in farming.

H. M. Hamlin pointed out in 1934 that supervised farming had generally been confined to one project per boy. ^{9/} The supervised farming program is gradually being broadened to include training and experience in many enterprises. It is now considered by many as a period when the boy progresses by experience and accumulation of capital stock through the steps that lead into the farming occupation.

Lattig and Bingham believe that the vocational agriculture instructors who fail to make use of project records are missing a great opportunity for fulfilling one of the major vocational agriculture objectives. ^{10/} Records offer opportunities for the comparison of results from similar projects and help to stimulate the discussions and study of many of the related problems

^{9/} H. M. Hamlin -- "A Philosophy of Supervised Practice," Agricultural Education Magazine, No. 6, 1934, p. 104.

^{10/} H. E. Lattig and Bingham, "Utilizing project records to Stimulate Interest and Provide Problems for Class Work", Agricultural Education Magazine, No. 4, 1931, p. 44.

growing out of the project records.

In a series of conferences held in Wisconsin in 1940 by Ivan Fay, it was agreed that: (1) present programs of supervised farming leave much to be desired, (2) one objective that appeals to the boy is the probability of making money, (3) each boy should carry out at least four activities that could be called improvement or supplementary projects, and (4) in the final analysis the success of the supervised practice program depends more on the teacher than on the boy. 11/

Another development in recent years has been the long-time program. A. M. Field has recommended a long-time farm planning program in Minnesota which has been adopted by other states. 12/ It is a combination of ownership projects and improvement projects planned and carried out over a period of five years or more. It is desirable for students who take more than one year of vocational agriculture. The long-time plan offers possibilities for influencing many enterprises on the farm which require a long time for effective completion. ^{13/} Field believes that the project becomes a part of the long-time program. He also believes that there are certain essential features of the long-time plan. They are: (1) several enterprises involved, (2) no time limit set for completion, (3) the entire farm becomes the basis of study so that better learning and farming activities are possible. Many states now have similar objectives toward the supervised farming program in its eventual establishment of the boy.

11/ Ivan Fay, "It Depends on the Teacher", Agricultural Education Magazine, No. 5, 1940, p. 90.

12/ A. M. Field, "The Long-time Plan for Farm Practice", Agricultural Education Magazine, No. 4, 1932, p. 181.

S. S. Sutherland 13/ compared the supervised program of the early '20's with that of 1939. In the first place, they were not farming programs, they were "projects", single enterprises. Quite commonly, they were changed each year in which the boy was enrolled in vocational agriculture. They were of small scope. Emphasis was placed on financial returns. Every boy selected a project with little guidance from the instructor nor thought as to why he was carrying it. It was a federal requirement--that was enough. The projects were inadequately planned or not planned at all. The word "analysis" was merely a term used by supervisors. These projects disappeared into thin air when the boy graduated from high school. Sutherland believes the picture is now different. There are supervised farming programs, more or less intelligently selected, adequately planned, and efficiently conducted. Farming programs are commercially sound, planned on a long-time basis and expanded as the pupil becomes better able to accept responsibility. It appears that supervised farming has arrived at the place that was talked about in the late '20's. He believes that if the objectives and ideals of today be right, we need have little fear for tomorrow's accomplishments.

Sutherland concluded that the interests and accomplishments of students enrolled in the first year course in vocational agriculture depend largely upon the teacher. Since the average student, upon enrolling in vocational agriculture, knows little about the facilities and objectives of the department, it is the teacher's job to familiarize each student with all phases of the department. If the teacher is to

13/ S. S. Sutherland, "Supervised Farming--Yesterday, Today and Tomorrow", Agricultural Education Magazine, No. 10, 1939, p. 190.

interest the student in the supervised practice program, he will teach each boy to recognize the types of farming on which the farmers of the community are dependent.

The practices used by various instructors may depend upon the needs of the individual boy. The approach is obviously different because each individual's needs differ. V. G. Martin 14/ found that the need for money is the purpose behind most projects. The approach is to get the boy to determine the amount of money needed for project investment, for personal expenses, and for savings. Martin found it is important to help the boy develop a plan for spending his money wisely.

From a study in New York, W. W. Adams 15/ found that of ninety-five instructors surveyed, there were seventy-seven who discussed supervised farming before school started as a means of interesting the boy in his supervised farming program. Other methods used by instructors to create interest were:

1. Class visitation to projects.
2. Magazines and newspapers.
3. Exhibits of projects at fairs.
4. Distribution of literature.
5. Letters to parents explaining the program.

R. M. Clark, 16/ Michigan State Supervisor, believes that supervised practice work which includes productive enterprises, improvement projects,

14/ V. G. Martin, "Earning and Spending Phases of Project Work", Agricultural Education Magazine, No. 2, 1930, p. 27.

15/ W. W. Adams, "Launching of Vocational Agriculture into Supervised Farming", Thesis--Library Cornell University, Ithaca, New York, 1931.

16/ R. M. Clark, "Comprehensive Farming Program and Instructional Planning", Agricultural Education Magazine, No. 2, 1939, p. 51.

and supplementary skills that are based directly on the needs of the boys' home farms will provide the best kind of stimulus for learning.

The boys enrolling in vocational agriculture in many instances have elected to take the course without an understanding of the requirements. Many of these boys have no interest in agriculture as a vocation and do not plan to farm. Some boys, regardless of their interests, do not have and cannot obtain necessary facilities for supervised farming.

C. L. Mondart 17/ found that in Louisiana 31 per cent of the schools allowed the students to enroll in agriculture with no knowledge of the requirements of the course. He further stated: "Administrators of Vocational Agriculture, according to law, are legally and morally obligated to exclude boys not having the required facilities from classes of vocational agriculture. This necessarily implies the selection for training only those boys who desire, need, and have facilities for profiting by the instruction."

There have been several articles written by leaders in vocational agriculture who believe that, although selection is necessary, there are many boys interested in agriculture that do not have facilities for carrying projects. If these boys are to be enrolled in vocational agriculture, they should be provided with facilities for farming. Carl Howard, 18/ who has been a supervisor in several western states, believes from his experience that a boy can not really learn to farm without practical experience in farming to supplement his school training.

17/ C. L. Mondart, "Research Study in the Selection of Students of Vocational Agriculture", Agricultural Education Magazine, No. 1, 1941, p. 14.

18/ Carl Howard, "Teaching Activities in Supervised Farming", Agricultural Education Magazine, Vol. XIII, 1940, No. 1 p. 8, No. 2 p. 28, No. 3 p. 48.

For years authorities in agricultural education have stressed planning of the individual's supervised farming program. Many farming programs fail because definite plans for their execution were not worked out in advance. The plans as first drafted will be general in character and will include those problems that are obvious to the boy. Following the general plan, there gradually evolves the worthwhile details of a workable plan for procedure.

L. M. Sasman 19/ suggests that a list of abilities a farmer needs to have should be determined. The boy cannot build his program from the practices that he has not mastered. E. C. Magill 20/ emphasizes that it is important that the boy understand the purpose and knows the standard in planning in order to arrange his own program well. As an aid in developing the boy's understanding of how to plan, Sweaney 21/ found in a study of 24 departments in Iowa, that there were several devices that assisted the boy. He lists them as follows:

1. Making a budget.
2. Analyze completed project records for experience.
3. Use of boy's previous records as a guide.
4. Make additions to the plan as the project progresses.

19/ L. M. Sasman, "Supervised Practice in Farming", Agricultural Education Magazine, No. 5, 1932, p. 37.

20/ E. C. Magill, "Planning Supervised Farm Practice", Agricultural Education Magazine, No. 6, 1933, p. 57.

21/ H. P. Sweaney, "Factors Contributing Toward Superior Programs of Farm Practice", Master's Thesis, Library Ames, Iowa, 1933.

From the many studies that have been initiated, authorities are of the opinion that there is room for improvement in the planning procedure as used by teachers of vocational agriculture. It is known that definite plans expedite and simplify all programs of work.

Finance is an ever present problem in all departments, for all projects, and among all boys. Much of the financial aid given boys to develop their supervised farming program is supplied by the parents. In an investigation conducted by Sweaney 22/ it was found that the boys' parents constituted the greatest single source of financial aid. He found that 50 per cent were financed by the parents and 30 per cent of the boys financed their own projects. Gibson 23/ states: "If the boy is to receive worthwhile training in financing projects with parent cooperation, the following steps and teaching procedures are suggested: 1. careful analysis of the proposed project enterprise be made; 2. a complete project budget be prepared by the boy; 3. the boy presents the budget for consideration and approval; 4. instructor in conference with the boy approves the budget; 5. the boy presents the budget to his parents; 6. instructor, boy, and parents together finally agree upon the financial status; 7. boy draws up a financial agreement; 8. instructor and boy check up on costs and income through use of records."

22/ H. P. Sweaney, "Factors Contributing Toward a Superior Program in Farm Practice in Iowa", Vocational Agricultural Department, Master's Thesis, 1938, Library Ames, Iowa.

23/ H. H. Gibson, "Developing Ability to Finance a Farm Business", Agricultural Education Magazine, No. 7, 1940, p. 128.

Of what value are records is a question asked by many boys doing accounting. The uses of planning budgeting and financing are becoming more important every day. Changing conditions have made farmers conscious of record keeping in order to meet government requirements. The Agricultural Adjustment Administration, Farm Security, and many others are insisting on some form of record. Now more than ever will accounting be required. O. C. Aderhold 24/ believes that, with the lowering of exemption in income taxes, more farmers will have to keep records. Many teachers report greater success than ever before in supervising the starting programs of accounting and interpretation.

Supervision of the boy's farming program is a major problem of vocational agriculture teachers. The supervision given the boy must contribute to the manipulative skills and the managerial abilities of the boy. It is generally conceded that more boys are given charge of manual labor, but often not allowed to make decisions of managerial practices. Experience has proved that, for the best results, the boy must be frequently visited and carefully supervised. Even the best and most reliable students may prove disappointing if the supervision is neglected. G. C. Cook 25/ gives these reasons for instructor's visiting the boy frequently: 1. the boy needs the instructor's interest and encouragement; 2. the teacher must suggest scientific and practical measures for the boy to follow; 3. he must win the confidence and respect of the parents; 4. the boy must be checked to see that he keeps accurate

24/ O. C. Aderhold, "Income Tax and Farm Records", Agricultural Education Magazine, No. 9, 1942, p. 163.

25/ G. C. Cook, Handbook of Teaching Vocational Agriculture, Publisher Interstate 1938, p. 263.

records, and carrying out the plans for his farm practice work."

In an investigation conducted by B. H. King 26/ it was found that the greatest difference between high and low ranking departments was in the number of hours spent in the supervision of the boys' projects. The hours spent in supervising the projects were 297 for the high ranking departments and 182 for the low. The comparative number of hours per boy was 7.4 for the high departments and 5.8 for the low. King further revealed that the high ranking departments had more boys enrolled as well as more hours spent in visitations per boy.

Authorities believe as Dickinson 27/ has stated that project supervision is the weakest link in the vocational agricultural program. The aims as he sees them are: 1. to see that records are kept, 2. to teach, 3. to see that the students follow the plan, and 4. to check the progress of the boy.

Carl Howard 28/ stated that the teacher should remember that his responsibility for keeping in close touch with his students is a continuing and never-ending job.

The success of the supervised farming program for any particular year is not the only measure for the program. The real measure of effectiveness is the number of former students engaged in farming.

26/ B. H. King, "Supervision of Projects and Rating of Departments", Agricultural Education Magazine, No. 5, 1933, p. 168.

27/ S. Dickinson, "Supervised Practice in Vocational Agriculture", Agricultural Education Magazine, No. 5, 1933, p. 106.

28/ Carl Howard, "Supervision Records", Agricultural Education Magazine, No. 7, 1939, p. 130.

E. A. Egan 29/ found that the type of agricultural program the instructors have, and follow-up has in the past had the greatest influence on the placement of young men in farming.

R. W. Gregory 30/ believes that the evaluation of vocational education in agriculture is placement in farming. He lists three criteria as the basis: "1. find and evaluate the opportunities to get into farming; 2. find what young men have to have with which to get into farming; and 3. find and implement a way for these young men wanting to farm to get what they have to have to get in."

As C. R. Allen 31/ puts it, "many people are concerned with the by-product of supervised farming rather than the main product which is a well-trained competent farm boy".

The problem before authorities today is how may the effectiveness of supervised farming be measured. The measuring devices are varied. G. P. Deyoe 32/ states that "evaluation should provide information for laymen and others which will lead to a more balanced viewpoint of the outcomes. For the teacher as well as the student, self-evaluation, as well as evaluation by other persons, has an important place. Opportunities should be provided for both approaches."

29/ E. A. Egan, "Efficiency of Vocational Agriculture Instruction in Montana", Masters Thesis, Montana State College Library, 1940

30/ R. W. Gregory, "Vocational Education in Agriculture is Placement", Agricultural Education Magazine, No. 10, 1940, p. 192.

31/ C. R. Allen, "Getting Educational Value out of Supervised Practice", Agricultural Education Magazine, No. 3, 1930, p. 60.

32/ G. P. Deyoe, "Evaluating Outcomes of Superior Farm Programs," Agricultural Education Magazine, No. 8, 1942, p. 146

Means of evaluating have been and are being tried based on results, procedures, and principles. In California, an evaluation was made based on the results obtained in each department. This was then used as the basis for reimbursing the school from federal and state funds appropriated for that purpose.

The American Vocational Association cooperating with the United States Office of Education is attempting a research project in evaluating ten per cent of the vocational agriculture departments in the United States. This evaluation is based primarily on procedures and practices used by the teachers. This study has been criticized by many authorities mainly because the study was based on procedures used rather than results obtained.

Another form of evaluating is suggested by G. A. Schmidt 33/ based on the observance of basic principles of vocational education relating to the philosophy of "doing to learn". He has listed sixteen standards covering the vocational education program in a general way. Each principle is allowed from zero to ten points depending upon the value of the standard in the particular situation being evaluated.

H. M. Hamlin 34/ believes that much of the program planning has been weak because the programs have dealt with procedures ignoring the objectives of the program. He further states "that objectives, programs, and evaluation must be studied together or all will be unsound".

33/ G. A. Schmidt, "Efficiency in Vocational Education in Agriculture", The Century Company, New York, 1928, p. 297

34/ H. M. Hamlin, "Planning and Evaluating in Agriculture Education", Agricultural Education Magazine, No. 10, 1941, p. 206

Studies in Montana

The studies and investigations made in Montana on vocational agriculture have dealt primarily with placement in farming and farm mechanics with special work being done on methods and procedures. In 1940, E. A. Egan 35/ conducted an investigation on the "Efficiency of Vocational Agriculture in Montana".

This study dealt primarily with the placement of boys in farming.

He suggested some principles to consider in the improvement of the supervised practice program.

1. The supervised practice program must be adapted to the home and community.
2. Projects should be selected after the boy has decided upon the type of farming he wishes to follow.
3. The program should be planned on a long time basis.
4. Planning must be accurate.
5. It must be of large enough scope.
6. Records must be kept on the entire farming program of the boy.
7. Interpretation of the records must be made to give record keeping any value.

In 1940, an investigation was made by J. W. Welker 36/ on "The Montana Farm Mechanics Program in Vocational Agriculture". This study revealed that the farm mechanics program needs greater attention to planning and application to the particular locality in which the department is located. If a program is to be fully justified, it must include a study of the important

35/ E. A. Egan, "Efficiency in Vocational Agricultural Instruction in Montana", Masters Thesis, Montana State College Library, 1940, p. 58

36/ J. W. Welker, "The Farm Mechanics Program in Montana," Masters Thesis, Montana State College Library, 1941, p. 49

farm enterprises in the area it serves and the instructor must make it fit the needs of the area.

An investigation was conducted by D. L. MacDonald 37/ in 1939 suggesting some "Needed Improvements in the Montana Vocational Agriculture Program". The investigation dealt with what the fathers of boys in vocational agriculture believe should be taught. The study revealed that the fathers want their sons taught the practical farm jobs with an adequate follow-up to the home farm.

There were two studies made in 1937, 38/ and 39/, on supervised farming-- one dealt with the long-time planning and the other with teaching plans for project work. The materials were worked out by members of the class in supervised practice during the summer session in July, 1937.

The class believed that not enough attention has been given to the planning, selection, and analyzing of the supervised farming program.

The long-time planning program was emphasized as one of the important phases for the ultimate establishment of the boy in farming.

Summary

Directed or supervised practice in agriculture has come to have a broad and far-reaching meaning. It assumes a desirable relation between the teacher and the student in farming activities in and outside the classroom. In its

37/ D. L. MacDonald, "Improvements in the Montana Vocational Agriculture Program", Masters Thesis, Montana State College, 1939, pp. 50-51.

38/ R. H. Palmer, "The Long-time Planning Program", mimeo. Dept. of Agri. Ed. Circular, Montana State College, Bozeman, Montana, July, 1937

39/ R. H. Palmer, "Suggested Teaching Plan for Project Study", mimeo., Dept. of Agri. Ed. Circular, Montana State College, Bozeman, Montana, July, 1937

more desirable forms, it stimulates initiative and creative ability, ownership develops responsibility and makes for efficient farming. Authorities are fairly well agreed on the principal features of this program, although there are distinct variations in the recommended procedures in different states and regions.

Investigations of supervised practice reveal more about the kind of practices employed than about results obtained. The effectiveness of procedures has not been studied intensively.

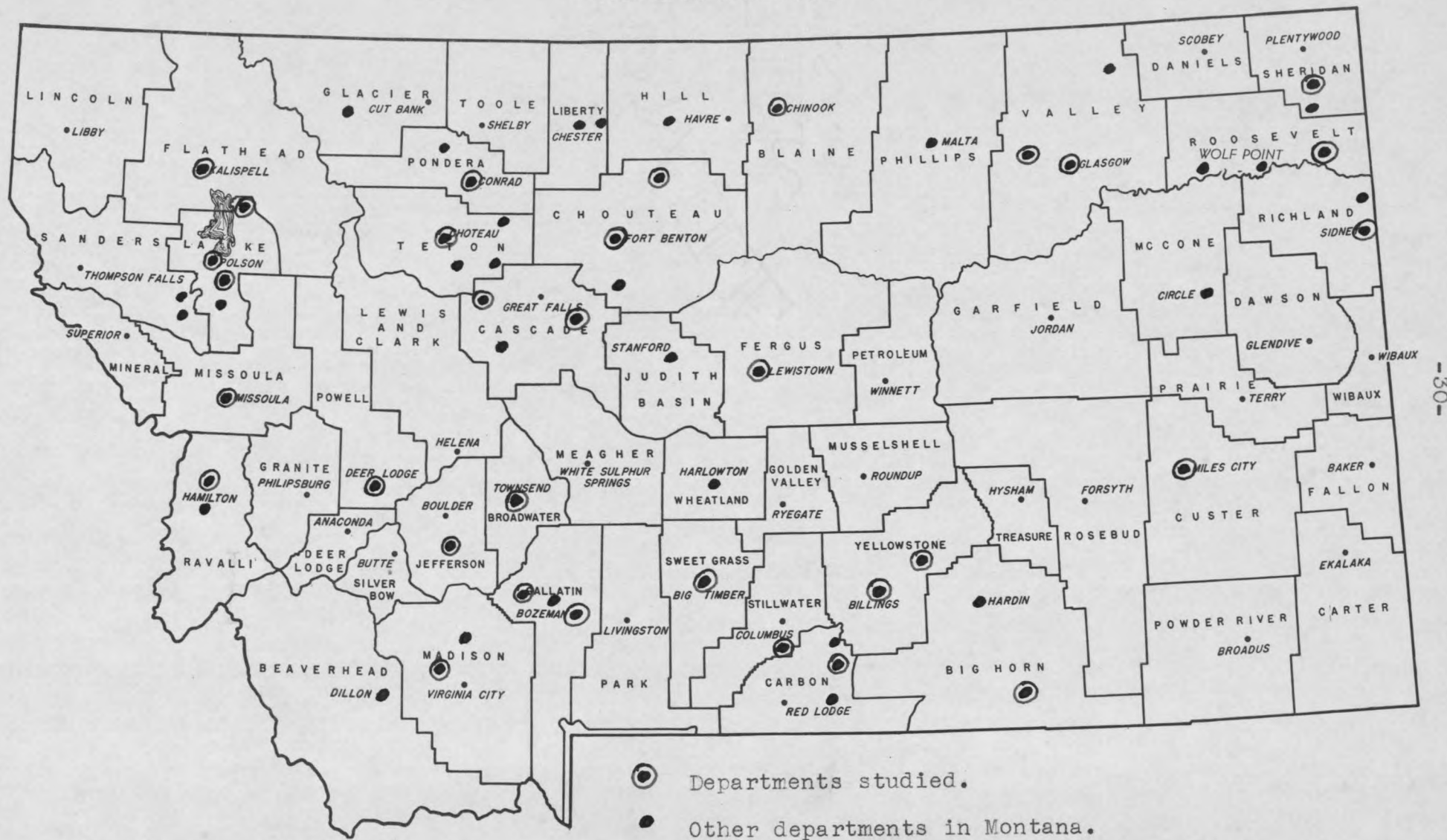
PART III. METHOD OF INVESTIGATION

Sources of Data -- In an attempt to discover the status of supervised practice farming in Montana, thirty-three vocational agriculture departments were selected. The instructors in these schools and the records and reports in the office of the State Department of Vocational Agriculture constituted the two sources of primary data used.

Methods of Gathering Data

Departments Selected -- The schools selected were those in which the instructors had been in residence for three years or more. From the 64 vocational agriculture departments in Montana 33 were chosen. As a result of this selection the following vocational agriculture departments were studied.

Absarokee	Culbertson	Missoula
Belt	Deer Lodge	Manhattan
Big Timber	Denton	Ronan
Billings	Fort Benton	Polson
Bridger	Glasgow	Stevensville
Bozeman	Hinsdale	Sidney
Bigfork	Kalispell	Simms
Big Sandy	Lodge Grass	Townsend
Conrad	Lewistown	Twin Bridges
Chinook	Medicine Lake	Whitehall
Choteau	Miles City	Worden



Departments' Ratings -- Three ratings were obtained on each of the 33 departments in Montana where the same instructor had been in residence for three years or more. Each of these departments was evaluated on a basis of its supervised farming program. These ratings were obtained from the state supervisor of vocational agriculture, the teacher trainer, and the assistant supervisor of vocational agriculture. The schools evaluated were divided into three groups--superior, average, and poor--and designated in the following discussion and tables as Group I, Group II, and Group III, respectively. There were 10 schools in Group I, 13 in Group II, and 10 in Group III.

These ratings were arrived at independently by the three men mentioned above. The supervisors and the teacher trainer are three men who have had many years of experience in supervising and observing the vocational agriculture programs of Montana. Their ratings agreed closely and it was assumed by the writer that the ratings are reliable.

The schools were designated by number so that the writer would not be biased in rating results and so that the schools would not be subjected to unpleasant recognition.

Means of Obtaining Data -- A questionnaire was devised for the collection of primary data from the 33 instructors whose departments were included in this study. 40/ Fourteen of the questionnaires were filled out during an interview with each instructor. The remaining nineteen instructors were contacted at a conference. The questionnaire was arranged to give information on the following phases of their programs:

40/ See appendix page 87 for copy of questionnaire.

1. Instructor's philosophy toward vocational education.
2. Characteristics of the instructor's program.
3. Methods of initiating relationships of boy, parent and instructor.
4. Methods of launching the supervised farming program.

Additional data on the results of the supervised farming programs were compiled and summarized from reports in the State Department of Vocational Agriculture. 41/

Limitations -- The validity of the findings as herein stated are as sound as possible to obtain. The questionnaires in many cases had to be filled in from memory by the instructors. In fact, many had scant records of their activities, course of study, or plans regarding the supervised farming.

From the interpretation of the data, there appear no glaring discrepancies or willful intent by instructors to pad or alter the questionnaire in order to make a better picture for themselves. The helpful attitude of the instructors in filling out the questionnaires as accurately as possible has done much to give a reliable survey of procedures used.

41/ See appendix page 93 for copy of supervised farming reports.

PART IV. ANALYSIS OF THE STUDY.

The data obtained from the thirty-three departments have been discussed under three general headings: (1) characteristics of the departments studied; (2) characteristics of instructors; (3) instructor's procedures in launching the supervised practice program.

In dealing with the characteristics of the departments, the enrollments, allotment of instructors' time, salaries paid, credits allowed, and the practice program summaries were studied. An analysis of the instructors' characteristics was based on their experience in both teaching and farming, their professional background and their philosophy of vocational agriculture. The study of the general procedures for launching the farm practice program deals with methods used in contacting the students, planning the projects, and supervising the programs.

Characteristics of Vocational Agriculture Departments Studied

Enrollment and Instructors' Time -- In order that a clearer picture of the Montana vocational agriculture departments may be had, the data on the general characteristics of all-day programs are summarized in Table II. The enrollment in the thirty-three vocational agriculture departments studied comprises 56.2 per cent of Montana's total enrollment, or 1291 boys. Of this number, 502 are in Agriculture I, or first year agriculture.

The writer has heard many instructors remark that the larger departments cannot do as good a job of teaching and carrying on a well-rounded program as smaller departments. This is not borne out by the

results from the thirty-three schools studied. The average enrollment per department is 48.2 boys in Group I, 38.5 in Group II, and 29.8 in Group III. In Agriculture I, Group I has an average of 18.3 boys enrolled as against 15.1 for Group II and 12.1 for Group III.

There was no appreciable difference in the proportion of farm and town boys enrolled. In all three groups, it was found that from 14 to 18 per cent of the class was made up of town boys. It is realized that there are some students classed as town boys who have facilities for farming and who are interested in farming as a vocation. However, this high percentage of town boys indicates poor selection on the part of the instructors.

The amount of time the instructor spends on vocational agriculture shows a marked variation. In Group I, 94.1 per cent of the teacher's time is spent on vocational agriculture. In Group II, only 86.7 per cent of the time was spent on vocational agriculture, while Group III spent just 82 per cent of the time teaching vocational agriculture. The variations in the amount of time spent on vocational agriculture by the instructors is evidence that the full-time instructor is doing a more worthwhile job.

TABLE II. AVERAGE NUMBER OF BOYS PER SCHOOL ENROLLED IN VOCATIONAL AGRICULTURE IN THIRTY-THREE MONTANA SCHOOLS, BY EFFECTIVENESS OF SUPERVISED FARMING 1940-1941

Effectiveness of Supervised Farming	Average Enrollment in Vocational Agri. Courses			
	First Year Agriculture			All Courses
	Farm Boys	City Boys	Total	
Group I ^a (superior)	14.9	3.4	18.3	48.2
Group II ^b (average)	13.0	2.1	15.1	38.5
Group III ^c (inferior)	9.8	2.3	12.1	29.8
All Groups	12.6	2.6	15.2	39.1

^a10 schools; ^b15 schools; ^c10 schools.

Salaries -- In the comparison of salaries paid to instructors for their services as vocational agriculture teachers, there is but a slight variation. (Table III.) The average for all thirty-three instructors for the school year 1941-1942 was \$2055.00, with Group I averaging \$2128.00, Group II averaging \$2106.00, and Group III averaging \$1917.00. There was very little difference between Groups I and II, just \$55.00. The average salary in Group III is \$189.00 less than Group II. Part of this difference is due to the amount of time spent teaching vocational agriculture. Some of the agriculture instructors are required by their school administrators to teach subjects other than vocational agriculture. Consequently, the school receives less federal and state reimbursement. It therefore follows, naturally enough, that these schools pay their vocational agriculture instructor less.

TABLE III. SALARIES PAID TO THIRTY-THREE VOCATIONAL AGRICULTURE
TEACHERS IN MONTANA BY EFFECTIVENESS OF SUPERVISED FARMING-
1941-1942

Teachers' Salaries	Group I ^a (superior)	Group II ^b (average)	Group III ^c (inferior)	Total
Highest	\$2550	\$2625	\$2200	\$2625
Lowest	1800	1680	1600	1600
Average	2128	2106	1917	2056

^a10 schools; ^b13 schools; ^c10 schools.

School Credit Given for Vocational Agriculture -- In Montana, the amount of high school credit given for vocational agriculture is determined by the school administrators. There is a rather wide variation in the amount of credit allowed as is shown in Table IV. Most of the schools granted one credit for classroom work, but several grant as much as two credits.

In Group I, all schools allowed from one-fourth to one-half additional credit per year for the boy's supervised farming program. Three schools in both Groups II and III did not allow any extra credit for supervised farming. Many of the departments gave extra credit on the basis of size of project and workmanlike manner in which the entire supervised farming program is handled.

TABLE IV. NUMBER OF SCHOOL AND PROJECT CREDITS GIVEN FOR VOCATIONAL AGRICULTURE IN THIRTY-THREE MONTANA SCHOOLS BY EFFECTIVENESS OF SUPERVISED FARMING 1940-1941

Effectiveness of Supervised Farming	Credits Given for Vocational Agriculture						
	No. of School Credits			No. of Project Credits			
	2	1½	1	1	½	¼	0
Group I ^a (superior)	3	0	7	0	7	3	0
Group II ^b (average)	1	1	11	1	7	2	3
Group III ^c (inferior)	1	0	9	0	6	1	3
Totals	5	1	27	1	20	6	6

^a10 schools; ^b13 schools; ^c10 schools.

Results of Supervised Practice Program as
Revealed by State Department Reports

In an attempt to discover the differences in the results obtained by the three groups of instructors, an analysis was made of the supervised practice reports as sent into the State Department of Vocational Agricultural Education. The figures used are from the 1941 project reports. For this year, there were 1087 boys enrolled in 28 schools. Five of the thirty-three schools studied did not report to the State Department of Vocational Agricultural Education. (Table V.)

Only 662, or 60 per cent, of the boys in all groups completed their projects. There was no great difference among the three groups in the per cent of boys completing their projects, but the percentage in the superior schools was slightly lower than in the average or inferior groups. The table shows that the efficiency of this training

device is very low, since only 3 out of 5 boys carried their projects through to completion. One reason for this low percentage is the poor selection of students and their projects by the instructors. In all three groups of instructors, from 14 to 18 per cent of the enrollment was made up of town boys. This would automatically account for nearly half of those boys not completing or not carrying projects.

In Group I, the average number of boys completing projects was 25.2; in Group II, it was 18; and in Group III, 17.3. Although the per cent of completion in all three groups was very nearly the same, Group I had a larger number completing projects due to the larger enrollment.

When analysis of the projects was made as to the average labor income, the data show that from a money-making standpoint, Group I had an income per boy of \$233.08, Group II had an average income of \$163.68 per boy, and Group III had an average income of only \$83.11 per boy. Since money-making is one of the primary objectives for supervised farming which a boy can most readily understand, it would appear that instructors of Group I have been most successful in reaching this objective. Their methods of practice and procedure have an average value of \$69.40 per boy over Group II and \$149.97 per boy over Group III.

There are two other important phases to the supervised practice program which again show the superiority of Group I. These are improvement projects and supplementary practices.

The data show that of the total of 850 improvement projects carried to completion by the 28 schools, 58.2 per cent or 442 improvement projects were carried on by Group I. Group II had 34.2 per cent, or 284, of the improvement projects, and Group III had but 12.6 per cent, or 104, of the projects. In the supplementary practices, there is not such a wide variation. Groups I and II have approximately the same totals, 444 and 452 respectively, while Group III had but 212. Group I had an average of 55.6 supplementary practices, Group II averaged 45.2 and Group III averaged 25.5.

The instructors in Group I exceeded the other groups in the number of improvement projects and supplementary practices. There would have been a wider variation were it not for one school in Group II which had over 50 per cent of the total number of improvement projects and supplementary practices of the group. The difference in the three groups indicates that the instructors in Group I realize that if a boy is to become established in farming, he must have a well-rounded program.

The instructors in the superior group have a superior farming program as is shown by the results obtained in the following: average labor income per boy; average investment in farming per boy; average number of improvement projects per boy; and the average number of supplementary practices per boy. The average group was superior to the inferior group of instructors on these same criteria.

TABLE V. SUMMARY OF SUPERVISED PRACTICE PROGRAM OF TWENTY-EIGHT VOCATIONAL AGRICULTURE DEPARTMENTS IN MONTANA BY EFFECTIVENESS OF SUPERVISED FARMING 1940-1941*

Summary of Supervised Farming	Effectiveness of Supervised Farming			
	Group I ^a (superior)	Group II ^b (average)	Group III ^c (inferior)	All Groups
Number of boys enrolled	429	388	270	1087
Number of boys completing projects	252	237	173	662
Percent of boys completing projects	58.7	61.0	64.0	60.0
Average number of boys completing projects per school	25.2	18.0	17.3	20.0
Total Labor Income (in dollars)	58736.57	38792.04	14377.59	111906.20
Average labor income per school	7342.07	3879.20	1597.51	3360.80
Average labor income per boy	233.08	163.68	83.11	102.95
Total Investment in Farming (dollars)	67266.45	54807.33	32014.18	154087.76
Average investment per school	7474.05	5480.73	3557.13	4669.32
Average investment per boy	156.80	141.26	118.57	141.75
Total Number of Improvement Projects	442	284	104	830
Average number of improvement projects per school	55.2	28.4	11.5	25.1
Average number of improvement projects per boy	1.8	1.2	0.6	0.8
Total Number of Supplementary Practices	444	452	212	1108
Average number of supplementary practices per school	55.5	45.2	23.5	33.5
Average number of supplementary practices per boy	1.8	1.9	1.2	1.0
Placed for farm experience--average number of boys per school	1.9	1.9	0.5	1.4

^a10 schools; ^b13 schools; ^c10 schools.

*Five schools did not have reports in the State Department on Final Summary of Supervised Farming. There was one school in Group I, three schools in Group II, and one school in Group III. Averages were taken on actual number reporting.

Characteristics of Instructors

Farm Experience and Investment -- The instructors' farming status is shown in Table VI. Of the thirty-three instructors reporting, twenty-seven reported that they had had farming experience either before entering college or after. Most of the replies indicated that the experience was acquired before college entry. One hundred per cent of the instructors in Group I had had farming experience. In Group II, 77.6 per cent had had farming experience. In Group III only 70 per cent had had previous farming experience. With regard to farm experience, 14 instructors indicated that they had some actual investment in farming enterprises. Of Group I, 70 per cent had actual farm investments, while only 30 per cent of Groups II and III had any ownership. This indicates the possibility that some instructors have not had sufficient farming experience although all teachers are supposed to have a minimum of two years' in order to qualify under the Smith-Hughes Act.

TABLE VI. FARMING STATUS OF THIRTY-THREE MONTANA VOCATIONAL AGRICULTURE INSTRUCTORS BY EFFECTIVENESS OF SUPERVISED FARMING 1941

Farming Status of Instructors	Effectiveness of Supervised Farming			
	GROUP I ^a (superior) per cent of instructors	GROUP II ^b (average) per cent of instructors	GROUP III ^c (inferior) per cent of instructors	ALL GROUPS per cent of instructors
Farming experience before college	100	77.6	70	82
Instructors having some investment in farming	70	30	30	43

^a10 schools; ^b13 schools; ^c10 schools.

Professional Background -- In an attempt to discover if there is any additional significant variation in the instructor's effect on the vocational agriculture program, a comparison of their teaching experience, graduate work and salary was tabulated.

The teaching experience of the three groups does not vary greatly. The average is eight years of teaching experience. The range of experience is from three to nineteen years as is shown by Table VII.

TABLE VII. NUMBER OF YEARS OF TEACHING EXPERIENCE OF THIRTY-THREE MONTANA VOCATIONAL AGRICULTURE INSTRUCTORS BY EFFECTIVENESS OF SUPERVISED FARMING 1942

Length of Teaching Experience	Effectiveness of Supervised Farming			
	Group I ^a (superior)	Group II ^b (average)	Group III ^c (inferior)	All Groups
Greatest number of years	14	19	14	19
Least number of years	3	3	4	3
Average number of years	7.9	9.0	7.3	8.0

^a10 schools; ^b13 schools; ^c10 schools.

In Group I there were five instructors with six years or less experience and five instructors with seven to fourteen years teaching experience. In Group II there were four instructors with six years or less experience and nine with seven to nineteen years teaching experience. In Group III there were six instructors with six years or less teaching experience and four instructors with seven to fourteen years experience.

From the standpoint of graduate courses in professional and technical fields, the number of credits earned varied from none to twenty-three.

(Table VIII) The average for Group I was 9.3 credits. For Group II the average was 9.4 and for Group III there was an average of 10.5 credits.

Group III has more graduate credits than either Groups I or II. This may be a result of pressure by the State Supervisor of Agricultural Education to attend summer schools, or it may be that instructors in the inferior group felt a need for more training in order to improve their teaching.

TABLE VIII. GRADUATE CREDITS EARNED BY THIRTY-THREE VOCATIONAL AGRICULTURE INSTRUCTORS IN MONTANA BY EFFECTIVENESS OF SUPERVISED FARMING UP TO 1942*

Effectiveness of Supervised Farming	Number of Graduate Credits Earned		
	Greatest Number	Least Number	Average Number
Group I ^a (superior)	21	0	9.3
Group II ^b (average)	18	0	9.4
Group III ^c (inferior)	23	2	10.5
All Groups	23	0	9.6

*Groups I and II each had one instructor with no graduate work.

^a10 schools; ^b13 schools; ^c10 schools.

Instructors' Purposes -- In an attempt to determine their viewpoints regarding supervised practice, instructors were asked to rate in importance the four phases of vocational agriculture--class work, supervised farming, farm mechanics, and Future Farmer of America activities. These data are shown in Table IX.

The thirty-three Montana vocational agriculture instructors, as a Group, rated supervised practice first in importance, farm mechanics second, class work third, and F. F. A. fourth.

TABLE IX. RATING OF FOUR PHASES OF VOCATIONAL AGRICULTURE BY THIRTY-THREE VOCATIONAL AGRICULTURE INSTRUCTORS IN MONTANA BY EFFECTIVENESS OF SUPERVISED FARMING, 1941

Effectiveness of Supervised Farming	Rating of Phases of Vocational Agriculture			
	Supervised farming	Farm mechanics	Class work	Future Farmers of America
Group I ^a (superior)	1	2-3	4	2-3
Group II ^b (average)	1	2	3	4
Group III ^c (inferior)	<u>2</u>	<u>1</u>	<u>3</u>	<u>4</u>
All Groups	1	2	3	4

^a10 schools; ^b13 schools; ^c10 schools.

When the three Groups were compared, there was a marked difference in their ratings. Both Groups I and II rated supervised farming as the most important of the activities. Group III rated farm mechanics as first and supervised farming as second. The reason for this is that farm mechanics is easier to conduct than the other three phases of the program. These figures show that Group III has lost sight of the purpose of establishing the boy in farming. Further evidence of the truth of this statement appears as the study continues.

When the ratings were placed on a percentage basis, it was found that Group I valued all four parts of the program very nearly the same. Supervised farming led by 7 per cent. The other three parts of the program showed only 1 per cent variation.

In Group II, supervised farming and farm mechanics were valued within 1 per cent of each other. These instructors have placed Future Farmer activities last as did the instructors in Group III. In Group III, the spread in percentages was greater than in either Groups I or II. Future Farmers' rating was placed very low. On a percentage basis, these instructors placed Future Farmers' activities 23 per cent below the top rating.

In general, both Group I and Group II were fairly consistent, except for their evaluation of Future Farmer activities. The evaluation of the four phases of vocational agriculture brings to our attention the attitude of the instructors toward promoting a well-rounded and worthwhile program for their particular community.

The vocational agriculture instructors in the three groups ranked the objectives of supervised farming as shown in Table X.

TABLE X. RATING OF OBJECTIVES FOR SUPERVISED FARMING BY THIRTY-THREE VOCATIONAL AGRICULTURAL INSTRUCTORS IN MONTANA BY EFFECTIVENESS OF SUPERVISED FARMING 1941

Objectives for Supervised Farming	Effectiveness of Supervised Farming			
	Group I ^a (superior)	Group II ^b (average)	Group III ^c (inferior)	All Groups
	Instructors	Instructors	Instructors	Instructors
	Rating	Rating	Rating	Rating
To establish boys in farming	1	1	2	1
To develop an interest in farming as an occupation	2	5	3	2
To provide a means of earning for the farm boy	3	8	6	3
To develop methods of economical production	4	3	5	4
To develop managerial abilities to balance manipulative abilities normally learned on the farm	5	7	8	7
To improve farming methods used on the individual's home farm and community	6	2	1	6
To contribute to improving living conditions on the home farm	7	6	4	8
To contribute to the efficiency of the farm as a whole	8	4	7	5

^a10 schools; ^b13 schools; ^c10 schools.

The instructors in Groups I and II placed establishment in farming as their main objective of supervised farming. Group III placed the above objective second and placed improved farming methods used on the individual home farm as first. It appears that the eight objectives listed are in two groups--those that deal with the boy (1, 2, 3, 4, and 5) and those (6, 7, and 8) that deal with the farm and community.

In evaluating the eight objectives, the instructors seemed to have in mind either the welfare of the boy as the primary consideration or the improvement of farms in the community. The instructors in Group I consider the boy their major objective and the farm and community secondary in importance. There is a fairly close relationship between Groups II and III. Both seem to have mixed the objectives pertaining to the boy with those pertaining to the farm and community.

The writer concludes from the data gathered that the primary aim of superior instructors is the development of the boy toward establishment in farming. Group I has this opinion while Group II, after having placed this activity first, becomes rather vague in following this purpose consistently. In Group III, the instructors are at a loss as to what their philosophy toward supervised farming really is.

Instructors' Procedures

Obtaining names of prospective students -- Judging from the data gathered, vocational agriculture instructors obtain names of prospective students from four main sources--the county superintendent, the Future Farmers, field days, and from country schools. (Table XI.) All of the 33 instructors use the four sources mentioned. The survey shows that of the 506 names obtained by all instructors, 206 were gathered from county superintendents' records. Future Farmer members are responsible for 115 names. Group I obtained 200 names. Of these, 103, or 51.5 per cent, were secured from the county superintendent. Group II obtained 188 names with 52, or 27.6 per cent, taken from the files of the county superintendents. Group III procured 118 names of which 51, or 43.2 per cent, were received from the above source. The average per school in each of the three groups shows that Group I had an average of 20 boys' names per school. Group II had an average of 14.4, and Group III had 11.8 boys' names per school.

The superior group, and to some extent Group II, realize the value of obtaining the names of prospective students from the county superintendent's records. The names taken from this source are primarily those of farm youths who are eligible for enrollment in vocational agriculture. The instructors of Group I are more resourceful in obtaining names of prospective students from reliable sources.

TABLE XI. METHODS USED IN OBTAINING NAMES OF PROSPECTIVE STUDENTS BY THIRTY-THREE VOCATIONAL AGRICULTURE INSTRUCTORS IN MONTANA BY EFFECTIVENESS OF SUPERVISED FARMING 1940-1941

Method of Obtaining Names	Effectiveness of Obtaining Names			
	Group I ^a (superior)	Group II ^b (average)	Group III ^c (inferior)	All Groups
	Number of names	Number of names	Number of names	Number of names
Through Future Farmers	29	48	38	115
Field Day	5	50	7	62
County Superintendents	103	52	51	206
Country Schools	13	9	14	36
Other Means	<u>50</u>	<u>29</u>	<u>8</u>	<u>87</u>
Total	200	188	118	506

^a10 schools; ^b13 schools; ^c10 schools.

Contacting Prospective Students -- The devices used by instructors in contacting boys eligible for vocational agriculture are much the same in all three of the groups. The data revealed that the two most used means are by personal visits and by letters. (Table XII.) In the employing of the Future Farmer organization as a means of contact, Group II exceeds Groups I and III by a considerable margin. The instructors in the superior group do not make the contacts before the opening of school as do the teachers in both Groups II and III.

From the scant amount of data obtained, it appears that all three groups use letters frequently to contact the boys. The most noticeable variation in personal visits is Group II, which exceeds Groups I and III

by a considerable margin. Group II also exceeds the others in contacting boys through the Future Farmer organization. It is indicated that Group I is weak in actual contacting of the boy by the instructor. This may be explained by the publicity given the program. If the vocational agriculture program is kept before the people, the need for contacting of prospective students is lessened.

TABLE XII. METHODS USED IN CONTACTING BOYS BY THIRTY-THREE INSTRUCTORS OF VOCATIONAL AGRICULTURE IN MONTANA BY EFFECTIVENESS OF SUPER-
VISED FARMING 1940-1941

Methods Used in Contacting	Effectiveness of Contacting Boys			
	Group I ^a (superior)	Group II ^b (average)	Group III ^c (inferior)	All Groups
	Number of Boys	Number of Boys	Number of Boys	Number of Boys
Letters	109	128	77	314
Personal Visits	78	124	62	264
At Future Farmers	11	50	16	77
Other Ways	3	18	12	33
Not Contacted	<u>60</u>	<u>28</u>	<u>32</u>	<u>120</u>
Total	261	348	199	808

^a10 schools; ^b13 schools; ^c10 schools.

Visiting Homes of New Students -- The time of year when the first visits were made to the homes of new students is shown on Table XIII.

The visits made before school opens in the fall indicate that all three groups made about 40 per cent of their total calls at that time. During

the first week of school, Group I made 21 visits to homes of parents. Group II made one such call, and Group III made none. During the second week of school, Group I again made 21 calls, while Groups II and III made only a few. This proportionate number of visits is marked until late fall, at which time Groups II and III exceed Group I in the number of calls. Group II and Group III each made most of their first calls at the homes of their students in early winter and spring.

The average number of visits made by each instructor to new and prospective students indicated that Group I averaged 18.5, Group II averaged 15 calls, and Group III had an average of 14.9 visits.

The data reveal that Group I made the greatest number of calls before school started and the first three weeks following enrollment. In Groups II and III, most of the visits were made in late fall, winter, and spring.

It is obvious that the instructors in Group I employ more effort in contacting their boys on the home farm as early as is possible. This is further exemplified by the number of days each instructor devotes to launching the boy on his supervised farming program. (See page 35.)

TABLE XIII. TIME OF YEAR WHEN THE FIRST VISITS WERE MADE TO THE HOMES OF THE NEW STUDENTS BY THE THIRTY THREE VOCATIONAL AGRICULTURE INSTRUCTORS IN MONTANA BY EFFECTIVENESS OF SUPER-
VISED FARMING 1940-1941

Time of First Visit to Home of Student	Effectiveness of First Visit			
	Group I ^a (superior)	Group II ^b (average)	Group III ^c (inferior)	All Groups
	Number of Boys Visited	Number of Boys Visited	Number of Boys Visited	Number of Boys Visited
Before School Started	77	79	59	215
First Week of School	21	1	0	22
Second Week of School	21	1	10	32
Third Week of School	8	7	0	15
Fourth Week of School	9	14	6	29
Late Fall	15	41	30	86
Winter	5	6	7	18
Spring	15	44	27	86
Summer	<u>8</u>	<u>1</u>	<u>10</u>	<u>19</u>
Total	185	194	149	528
Average Per Department	18.5	15	14.9	16

^a10 schools; ^b13 schools; ^c10 schools.

Total Supervisory Visits Made During the Year — The survey indicates that 1575 visits were made by all thirty-three instructors to their all-day students in the first year agriculture classes. (Table XIV.) Of this number, 618 calls were made by Group I. Group II made 564 calls and

Group III made 393. When the average number of visits made by each instructor was considered, Group I exceeded the other two groups. Group I had an average of 61.8 calls; Group II, 43.3; and Group III, 39.3.

Group I realizes more fully the necessity of making several supervisory visits to each boy's home. A conference with the boy and his parents creates a close relationship which is necessary for promoting and developing initiative that leads to definitely superior results.

TABLE XIV. TOTAL NUMBER OF VISITS MADE TO THE ALL-DAY STUDENTS IN AGRICULTURE I BY THE THIRTY THREE INSTRUCTORS OF VOCATIONAL AGRICULTURE IN MONTANA BY EFFECTIVENESS OF SUPERVISED FARMING
1940-1941

Visits to All-day Students	Effectiveness of Supervisory Visits			
	Group I ^a (superior)	Group II ^b (average)	Group III ^c (inferior)	All Groups
Total Number	618	564	393	1575
Average Number	61.8	43.3	39.3	47.7
Per cent of total visits made	39.2	35.8	25.0	100.0
Number per boy	3.3	2.5	3.2	3.1

^a10 schools; ^b13 schools; ^c10 schools.

Launching Students in Supervised Farming — In initiating the supervised farming programs by the vocational agriculture teachers, 90 per cent of the Group I and Group III schools, according to the survey data, first discussed the program with their classes in September, or the first month of the school year; whereas 85 per cent of the Group II schools discussed

the program the first month. Two instructors of Group II began their first discussion the second month, or October, and only one instructor of Group III launched the program in the second month. One member of Group I began the discussion in the winter months, but no school of the three groups began to initiate the program as late as the following spring.

The three groups used somewhat the same methods in initiating the supervised farming programs. All groups used Future Farmer meetings as an incentive to start the programs. Ninety per cent of Group I, 46 per cent of Group II, and 50 per cent of Group III instructors used Future Farmer Officers' talks to help organize and establish the supervised work. All the groups used record books of former vocational members and various efficiency factors as good and recommended practices. (Table XV.)

Probably one of the most noteworthy procedures employed to develop enthusiasm among the students was that of project tours to present and former F.F.A. members. Eighty per cent of the schools in Group I used project tours to get the students interested in supervised farming, whereas only 31 per cent of Group II and only 20 per cent of Group III employed this means. All three groups used awards to motivate the interest of the boys. (Table XV.) Group I gave ten awards and Group III gave four. It is noteworthy that Group I used a total of fifteen various methods to launch the program, Group II used twelve methods, and Group III used only ten.

In addition to the above listed methods, Group I used outstanding

projects, profits, state farmers, magazines, farm surveys, to motivate interest in farming programs. (Table XV.) Group II used stories, pictures, and field trips as other means, whereas Group III reported using only fairs and field trips as other means of motivating the project work.

TABLE XV. PRACTICES EMPLOYED BY THE THIRTY-THREE INSTRUCTORS OF VOCATIONAL AGRICULTURE IN MONTANA TO LAUNCH STUDENTS IN SUPERVISED FARMING BY EFFECTIVENESS OF SUPERVISED FARMING 1940-1941

Method Used To Launch Boys	Effectiveness of Supervised Farming			
	Group I ^a (superior)	Group II ^b (average)	Group III ^c (inferior)	All Groups
	Per cent of in- structors	Per cent of in- structors	Per cent of in- structors	Per cent of in- structors
Future Farmer Meetings	50	61	60	57
Officer Talks	90	46	50	60
Old Record Books	70	77	80	75
Efficiency Factors	70	84	50	70
Project Tours	80	31	20	42
F.F.A. Awards	70	69	30	57

^a10 schools; ^b13 schools; ^c10 schools.

Selection of the Individual's Supervised Practice Program -- The data relative to the student's selection of a supervised program in farming were compiled in three tables: Farm Surveys, Montana Standards for Project Size, and Final Selection of Project by Agriculture I boys.

A total of 324 farm surveys were made by the instructors cooperating

in this study. (Table XVI.) These farm surveys were taken on the home farms of the boys enrolling in their first year of vocational agriculture. The general plan followed by Montana instructors is to have the entire class make a survey of some particular farm, to familiarize the student with practices being followed. The student then makes a survey of the home farm under the general supervision of the instructor. Groups I and II use this method to help the boy to choose a type of enterprise that will be adapted to the home farm program. Group I averaged 13.5 surveys per school, Group II averaged 11, and Group III averaged only 4.4.

The importance of farm surveys is two-fold; first, the contact made by the instructor in the home makes the parents and the boy feel that he is genuinely interested. Second, it acquaints the instructor with first-hand information regarding the actual circumstances under which the boy must carry on his projects.

TABLE XVI. FARM SURVEYS MADE THE FIRST YEAR BY VOCATIONAL AGRICULTURE STUDENTS IN THE THIRTY THREE DEPARTMENTS IN MONTANA BY EFFECTIVENESS OF SUPERVISED FARMING 1940-1941

Effectiveness of Supervised Farming	Average Number of Surveys	Average Number of Trips
Group I ^a (superior)	13.5	2.7
Group II ^b (average)	11.0	4.5
Group III ^c (inferior)	4.4	1.2
All Groups	9.8	2.9

^a10 schools; ^b13 schools; ^c10 schools.

A list of project standards was drawn up and approved at a conference of Montana's Vocational Agriculture Instructors held in the early nineteen thirties. These standards were recommended as only a minimum toward which to strive. They were made available to all Montana instructors.

The data gathered indicates that 90 per cent of the instructors in Group I have definite standards for project scope. It further reveals of this group that 40 per cent have standards much higher than those previously recommended. Of Group II, just 15.4 per cent use standards, and of Group III, 40 per cent. (Table XVII.) The most prominent finding is in the variation among the three groups.

Of the thirty-three instructors reporting, 18 use no standards for project approval. Group I has one instructor, or 10 per cent of the group, who used no standards. Group II has 11 instructors, or 84.6 per cent of their number who used no standards, and Group III has 6, which represents 60 per cent of their entire group, who used no project standards.

There is a difference of 74.6 per cent between the number of instructors using standards in Group I and the number using standards in Group II. Group III has 24.6 per cent more men using standards than does Group II.

The variation in the three groups indicates that most of the men in the superior group find the standards for governing the project scope important. The returns they get from their farm practices exceeds those of Groups II and III in: average labor income per boy, number of projects, and investments in farming. (Table IX.) It is evident that those instructors of Group III realize the value of standards for their boy's supervised farming program more than do those instructors in Group II.

TABLE XVII. PER CENT OF INSTRUCTORS USING MINIMUM STANDARDS FOR PROJECT SCOPE FOR SUPERVISED PRACTICE PROGRAMS IN MONTANA BY EFFECTIVENESS OF SUPERVISED FARMING 1940-1941

Minimum Standards Used	Effectiveness of Standards Used			
	Group I ^a (superior)	Group II ^b (average)	Group III ^c (inferior)	All Groups
Per Cent of Instructors Using Standards	90.0	15.4	40.0	45.5
Per Cent of Instructors Not Using Standards	10.0	84.6	60.0	54.5

^a10 schools; ^b13 schools; ^c10 schools.

The final selections of the farming program made by the first year all-day agriculture classes were considered on the following basis: (Table XVIII.)

1. Did the boy alone decide?
2. Did the boy and parent decide?
3. Did the boy, parent, and instructor decide?

The data reveal that 27 of the 33 instructors endeavored to have the decision made by the boy, parent, and themselves. In Group I, there are 90 per cent of the instructors who get this result. In Group II, there were 84 per cent of the instructors who got this same cooperation, and of the Group III instructors, only 70 per cent used this means.

In considering the final selection of each boy's project program, it was found that in Group I there were 90 per cent of the boys making their final selection with their parents or with both the parents' and instructors' assistance. Eighty-two per cent of the boys in Group II made their selection with help. Only 66 per cent of the Group III boys selected their projects with the aid of parents or instructor or both. There are 10 per

cent of the students in Group I, 18 per cent of those in Group II and 34 per cent of those in Group III who made their selections of projects without the aid of either parents or instructors.

Instructors in Groups I and II realize the importance of a good parent, boy, and instructor relationship. The instructors in Group III do not realize this since one-third of their students have made their selection without the guidance of either parents or instructor.

TABLE XVIII. COOPERATION OF BOY, PARENT, AND INSTRUCTOR IN FINAL SELECTION OF FIRST YEAR AGRICULTURE PROJECTS IN THIRTY-THREE VOCATIONAL AGRICULTURE DEPARTMENTS IN MONTANA BY EFFECTIVENESS OF SUPERVISED FARMING 1940-1941

Effectiveness of Supervised Farming	Persons Cooperating in Selection of Projects			Total Number of Projects
	Boy Only Per cent of projects	Boy and Parents Per cent of projects	Boy, Parent and Instructor Per cent of projects	
Group I ^a (superior)	10	45	45	187
Group II ^b (average)	18	59	23	221
Group III ^c (inferior)	34	32	34	132
All Groups	19	48	33	540

^a10 schools; ^b13 schools; ^c10 schools.

Long-time Farming Plans Developed -- In an attempt to discover what the instructors are doing to assist the students in becoming established in farming, questions were asked to determine how many of the students made long-time plans. (Table XIX.)

From a total of 502 first year agriculture students, 349 made long-time plans. This number represents only 69.5 per cent of first year

agriculture students enrolled in the thirty-three departments. This means that 30.5 per cent of the students were not making any long-time plans for their establishment in farming.

Instructors in Group I make greater use of the long-time planning program than those in the other two groups. Of the 349 long-time plans, this group had 45.4 per cent, Group II had 36.6 per cent, and Group III had 18 per cent of the long-time planning programs. All of the instructors in Groups I and II use this method of planning. In Group III, there were 30 per cent of the instructors reported as not using this plan.

Long-time planning has been one of the important devices recommended most highly to the instructors from the college where they received their training. It appears that more of these men need to follow this practice.

TABLE XIX. NUMBER AND PER CENT OF FIRST YEAR VOCATIONAL AGRICULTURE STUDENTS DEVELOPING LONG-TIME FARMING PLANS IN THIRTY-THREE MONTANA SCHOOLS BY EFFECTIVENESS OF SUPERVISED FARMING 1940-1941

Effectiveness of Supervised Farming	First Year Vocational Agriculture Students Making Long-Time Plans	
	Number	Per Cent
Group I ^a (superior)	158	45.4
Group II ^b (average)	128	36.6
Group III ^c (inferior)	63	18.0
All Groups	349	100.0

^a10 schools; ^b13 schools; ^c10 schools.

Planning Ownership Projects -- There are many instructors who still have the idea that their major responsibility is to keep school. They fail to recognize the fact that their purpose is to assist the boy in orienting himself in his farming program.

The instructors in all three groups use the practice of having the boys make general statements, financial estimates, and job plans. (Table XX.) However, the variation in the procedure used by the instructors in the three groups is very pronounced. There were 90 per cent of the instructors in Group I who had their boys state their purpose or objective for carrying a supervised farming program, whereas in Group II 72 per cent and Group III only 60 per cent of the instructors did this. The data further reveal that all three groups are weak in securing good relationships among the parents, the boy and the instructor. Although in Group I 50 per cent of the instructors have the boys plan their farming program with their parents, there are but 15 per cent of the instructors in Group II and 20 per cent in Group III that employ this procedure.

This is also reflected in the total amount of time spend by the instructors in planning the boys' supervised farming programs. The teachers in Group I spent an average of 8.4 class days in helping the boys plan their ownership projects. while in Group II they spent 6 days and in Group III they spent but 4.1 class days.

TABLE XX. PROCEDURES INSISTED UPON BY THIRTY-THREE VOCATIONAL AGRICULTURE INSTRUCTORS IN MONTANA IN ASSISTING THE BOYS IN PLANNING THE SUPERVISED FARMING PROGRAMS BY EFFECTIVENESS IN SUPERVISED FARMING 1940-1941

Procedures Insisted Upon By Instructors In Planning Programs	Effectiveness of Procedures			
	Group I ^a	Group II ^b	Group III ^c	All Groups
	(superior)	(average)	(inferior)	
	Per Cent Using	Per Cent Using	Per Cent Using	Per Cent Using
General Statement By the Boy	100	100	100	100
Financial Estimate By the Boy	90	100	80	91
Job Plans Made By the Boy	90	93	90	91
List of Objectives By the Boy	90	72	60	73
Written Parent Agreement	50	15	20	27
Average Number of Class Days Allotted For Planning	8.4	6	4.1	6.1

^a10 schools; ^b13 schools; ^c10 schools

Financing Ownership Projects -- As the boy's supervised practice program begins to formulate itself into a workable unit, there appears the ever present hurdle of finance to overcome. As the project program increases from year to year, project financing becomes increasingly important, both to the boy and the instructor. Montana's instructors use several methods to make financing the boys' projects possible. (Table XXI.)

The most used methods are:

1. Revolving projects.
2. Chapter Future Farmer loans.
3. Loans from Civic Organizations.
4. Parents advancing the money.
5. The boy's own savings.

The survey indicates that the parents provided the main source of finance; second was the boy's savings. The other methods, although used less extensively, are considered extremely important by those instructors who do use them.

In Group I, all sources of financing were used. The number of boys financed averaged 21.8 per department. In Group II all sources except Future Farmer loans were used. The average number of boys financed was 16. Group III did not use Future Farmer or Civic Organization loans as means for financing the projects. They had an average of 12.8 project loans.

This would indicate that the instructors in Group I and II gave more consideration to the financing of their boys' supervised farming program. They have assisted them to obtain financial aid when such aid was necessary.

Revolving projects and Future Farmer Chapter loans are both controlled and managed by the local chapter of Future Farmers of America. This explains further the emphasis many of the instructors place on the Future Farmer organization. It has provided substantial means for financing projects. Several of the teachers stated that loans of several hundred dollars would be obtained if their chapters were active and progressive. They state that most loans, other than those between boy and parents, are obtained through the efforts of the Future Farmer organization.

TABLE XXI. PER CENT OF VOCATIONAL AGRICULTURE PROJECTS FINANCED BY SPECIFIC METHODS IN THIRTY-THREE VOCATIONAL AGRICULTURE DEPARTMENTS IN MONTANA BY EFFECTIVENESS OF SUPERVISED FARMING 1940-1941

Methods of Financing Projects	Effectiveness of Supervised Farming			
	Group I ^a (superior)	Group II ^b (average)	Group III ^c (inferior)	All Groups
	Per cent of Projects	Per cent of Projects	Per cent of Projects	Per cent of Projects
Parents Advancing Money	50	45	45	47
Boy's Own Financing	17	14	41	23
F. F. A. Revolving Projects	9	12	4	9
F. F. A. Chapter Loans to Boys	8	0	0	2
Loans from Civic Organizations	2	4	0	2
Other Means of Financing	5	7	4	5
No Provision Made in Plan for Financing	9	18	6	12

^a10 schools; ^b13 schools; ^c10 schools.

Cooperative Farming Activities -- The questionnaire divided cooperative activities into three phases, namely, marketing, buying, and production.

The data revealed that there were 45 cooperatives being carried on by the thirty-three instructors. A three group division shows Group I has 53 per cent of all the cooperatives, Group II has 33 per cent of the cooperatives, and Group III has only 14 per cent of the total cooperatives. (Table XXII). Of the three types listed, buying cooperatives are the most popular. The production type ranks second and the marketing type last.

The kinds of cooperatives carried on by the three groups show variation. (Table XXIII). Group I has a variety such as fruits, vegetables, grain, poultry, stock, feeds, and seeds. In Group II, the cooperatives included stock, poultry, vegetables, and seeds. Group III has just cooperatives including poultry and hogs.

Most of the reports indicated that all the cooperative activities are a part of the Future Farmer organization and are administered by them. Those instructors having an active Future Farmer chapter have developed more extensive cooperatives. The primary reason for development was to help the boys who were chapter members.

TABLE XXII. PER CENT OF COOPERATIVE ACTIVITIES IN MARKETING, BUYING, AND PRODUCTION USED IN TWENTY-EIGHT VOCATIONAL AGRICULTURE DEPARTMENTS IN MONTANA BY EFFECTIVENESS OF SUPERVISED FARMING 1940-1941

Effectiveness of Supervised Farming	Per Cent of Cooperative Activities Per Department			
	Marketing	Buying	Production	Total
Group I ^a (superior)	63.0	58.5	43.0	53.0
Group II ^b (average)	25.0	34.8	36.0	33.0
Group III ^c (inferior)	12.0	8.7	21.0	14.0
All Groups	100.0	100.0	100.0	100.0

^a10 schools; ^b13 schools; ^c10 schools.

TABLE XXIII. KINDS OF COMMODITIES USED IN COOPERATIVE ACTIVITIES IN THE THIRTY-THREE VOCATIONAL AGRICULTURE DEPARTMENTS IN MONTANA BY TYPE OF COOPERATIVE ACTIVITIES AND EFFECTIVENESS OF SUPERVISED FARMING 1940-1941

Types of Cooperative Activities	Effectiveness of Supervised Farming		
	Group I ^a (superior)	Group II ^b (average)	Group III ^c (inferior)
	Kinds of Commodities	Kinds of Commodities	Kinds of Commodities
Marketing	Apples Onions Fryers Brooders Chicks	Hogs Potatoes	Poultry
Buying	Chicks Potatoes Cod liver oil Boxes Sprays Turkeys Hogs Feed Seed	Hogs Potatoes Turkeys Seed Chicks Poultry	Hogs Chicks
Production	Onions Chicks Wheat Poultry Potatoes Hogs	Hogs Turkeys Potatoes Vegetables	Hogs

^a10 schools; ^b13 schools; ^c10 schools.

Accounting -- Practice record keeping has been used for many years as a means of instructing the boys in simple farm accounting. In earlier years, practice was gained by using fictitious diaries of production enterprises. The newer recommended practice is to solve actual accounting problems encountered by the boys in their projects. To discover which devices instructors use, one section of the questionnaire included accounting practices.

The data show (Table XXIV) that there was a gradual upward trend among the three groups of instructors in the use of the older method of teaching farm accounting. The percentage of instructors using practice records for accounting is as follows: Group I, 50 per cent; Group II, 77 per cent; Group III, 80 per cent. There was slight difference in the use of prepared fictitious diaries. In Group I, there were 4 instructors using the device, in Group II, there were 7, and in Group III, 6 instructors used prepared diaries. In regard to the length of time devoted to practice accounting, Group I used an average of 3.1 hours, Group II used an average of 5.7 hours, and Group III used 5.5 hours. The survey indicates that the superior teachers are not using practice accounting to the extent that the teachers in Group II and III use it.

The instructors who do not use practice accounting have altered their accounting instruction so that it will apply in actual problems. The trend is to discard the prepared diary form of instruction. Further evidence indicates the change taking place in the type of project account books now being used. Nearly all instructors are using, or starting to use, the Montana record book. This book is so constructed that several enterprises can be kept in the one book. In the older type of record book, one was necessary for each project the boy carried. Three instructors who were

questioned in regard to the Montana record book reported that they prefer to use the accounting practice problems at the time the problems arise in the boys' projects. The diary method is being discarded by the more progressive group.

TABLE XXIV. PERCENT OF INSTRUCTORS USING PRACTICE ACCOUNTING TO TEACH PROJECT ACCOUNTING IN THIRTY-THREE VOCATIONAL AGRICULTURE DEPARTMENTS IN MONTANA BY TYPES OF ACCOUNTING AND BY EFFECTIVENESS OF SUPERVISED FARMING 1940-1941

Effectiveness of Supervised Farming	Types of Practice Accounting	
	Practice Record Keeping Per cent Using	Prepared Diaries Per cent Using
Group I ^a (superior)	50.0	40.0
Group II ^b (average)	77.0	54.0
Group III ^c (inferior)	80.0	60.0
All Groups	69.7	51.5

^a10 schools; ^b13 schools; ^c10 schools.

Supervision of the Supervised Practice Program -- The purposes of instructors' supervisory visits are: (Table XXV.)

1. To assist with farmer problems.
2. To check records.
3. To improve the good will of the parents.
4. To check project methods.
5. To assist with supervised farming problems.
6. To encourage boys and increase interest.

One hundred per cent of the instructors in Group I considered objectives 1, 2, 4, and 6 to be their main purposes in supervising. In

addition, 70 per cent of the same group of teachers checked objectives 3 and 5. In Group II, there were 53 per cent of the instructors who checked objectives 3 and 6. In the same group, 45 per cent checked number 4, and 38 per cent checked objectives 1, 2, and 5. Group III checked very similarly to Group II. Fifty per cent of those men checked objectives 2 and 4, while forty per cent checked 1, 3, 5, and 6.

The study reveals that the instructors in Group I have four purposes in mind when they make their supervisory visits. Groups II and III seem to have lost sight of the objectives of supervision. The evidence supports the opinion authorities have that many supervisory visits are made which have no bearing on the boy's farming program.

TABLE XXV. PER CENT OF THIRTY-THREE INSTRUCTORS IN VOCATIONAL AGRICULTURE STATING SPECIFIC PURPOSES OF SUPERVISORY VISITS BY EFFECTIVENESS OF SUPERVISED FARMING, MONTANA, 1940-1941

Purposes of Supervisory Visits	Effectiveness of Supervised Farming			
	Group I ^a (superior) Per cent of Instructors	Group II ^b (average) Per cent of Instructors	Group III ^c (inferior) Per cent of Instructors	All Groups Per cent of Instructors
Assist with farmer problems	100	38	40	58
Check records	100	38	50	60
Improve good will of parents	70	53	40	60
Check project methods	100	45	50	63
Assist with supervised farming problems	70	38	40	50
Encourage boys and increase interest	100	53	40	70

^a 10 schools; ^b 13 schools; ^c 10 schools.

There were fourteen of the thirty-three instructors included in this study who did not check the boys' accounts. (Table XXVI.)

In Group I, 20 per cent of the instructors stated that they did not check the books. In Group II, 38 per cent did not, and in Group III, 70 per cent of the teachers did not check the account books. There is a variation of 50 per cent between Group I and Group III.

The survey indicates that all three groups offered suggestions to the boy for the improvement of his project. The instructors in all three groups gave their instructions in both written and verbal forms. (Table XXVII.)

When the instructors were asked whether mileage allowed was sufficient for supervisory purposes, twenty-six of the thirty-three indicated that their mileage was sufficient. (Table XXVIII.) Twenty per cent of the instructors in Group I said mileage was insufficient. Thirty per cent of Group II and ten per cent of Group III reported insufficient mileage funds.

Although mileage for supervision is necessary and essential, the shortage does not appear to have affected materially the farming program.

TABLE XXVI. PER CENT OF THIRTY-THREE VOCATIONAL AGRICULTURE INSTRUCTORS CHECKING THE STUDENTS' ACCOUNT BOOKS AT TIME OF SUPERVISORY VISITS BY FREQUENCY OF CHECKINGS AND BY EFFECTIVENESS OF SUPERVISED FARMING, MONTANA, 1940-1941

Frequency of Checking Account Books	Effectiveness of Supervised Farming			
	Group I ^a (superior) Per cent of Instructors	Group II ^b (average) Per cent of Instructors	Group III ^c (inferior) Per cent of Instructors	All Groups Per cent of Instructors
Each Visit	40	54	10	36
Part of the Time	40	8	20	21
Never	20	38	70	43

^a10 schools; ^b13 schools; ^c10 schools.

TABLE XXVII. PER CENT OF THIRTY-THREE VOCATIONAL AGRICULTURE INSTRUCTORS LEAVING SPECIFIC INSTRUCTIONS WITH THE STUDENTS FOR IMPROVING THEIR SUPERVISED FARM PROGRAM BY EFFECTIVENESS OF SUPERVISED FARMING, MONTANA, 1940-1941

Types of Instructions	Effectiveness of Supervised Farming			
	Group I ^a (superior) Per cent of Instructors	Group II ^b (average) Per cent of Instructors	Group III ^c (inferior) Per cent of Instructors	All Groups Per cent of Instructors
Written	20	8	20	16
Verbal	50	23	30	33
Both Written and Verbal left with the Boy	30	69	50	51

^a10 schools; ^b13 schools; ^c10 schools.

TABLE XXVIII. PER CENT OF THIRTY-THREE VOCATIONAL AGRICULTURE INSTRUCTORS HAVING SUFFICIENT MILEAGE ALLOWANCE FOR SUPERVISING THE STUDENTS' SUPERVISED FARMING PROGRAM, BY EFFECTIVENESS OF SUPERVISED FARMING, MONTANA, 1940-1941

Sufficiency of Mileage Allowance	Effectiveness of Supervised Farming			
	Group I ^a (superior) Per cent of Instructors	Group II ^b (average) Per cent of Instructors	Group III ^c (inferior) Per cent of Instructors	All Groups Per cent of Instructors
Sufficient	80	70	90	79
Insufficient	20	30	10	21

^a10 schools; ^b13 schools; ^c10 schools.

Summary

This summary compares the superior and the poorer groups of departments. Due to the small number of cases included in this study, the contrast between the superior and the poorer groups is more revealing when mention of the average group is omitted. The instructors of the average group resemble the superior group in some features and the poorer group in other instances. Conclusions will be based on similarities, variations, and deficiencies of the upper and lower groups. The variations in the instructor's procedures and in results obtained are proof that Group I is superior to Group III. It will be noticed that the evidence formulated supports the ratings as they were made by the state's vocational agriculture authorities.

Similarities Among Instructors and Departments

1. There is considerable variation in the number of years of teaching experience of the vocational agriculture instructors, with no important difference between superior and inferior groups.

2. Both groups have from 14 to 18 per cent town boys enrolled in Agriculture I, showing that there is no advantage to the superior group in the facilities of beginning students for carrying on supervised practice.

Approved Teacher Procedures Employed by Both Superior and Inferior Groups

1. Both groups use much the same means of obtaining names of prospective students.

2. Both use letters, personal visits, and Future Farmer gatherings for contacting the prospective students.

3. Both groups use farm surveys in planning supervised farming programs.

4. Both groups, using similar devices, initiate the supervised farming

programs early in the school year.

5. Most Montana instructors use the Montana Record Book.

6. Both groups of instructors give instructions and suggestions to the boy during the supervisory visit.

Variations Among Instructors and Departments

1. The superior instructors consider supervised farm practice to be the most important phase of their programs.

2. The superior instructors consider the welfare of the boy and his establishment in farming as the major objective.

3. The poorer group have divided purposes, considering the welfare of the community to be as important as the welfare of the boy.

4. The superior departments have larger enrollments.

5. More school credit for supervised farm practice is given by the schools in the superior group.

6. All superior instructors have had farming experience whereas 30 per cent of the poorer group reported they had had no farming experience.

7. The majority of the superior instructors have some investments in farming while only 30 per cent of the poorer instructors reported financial investments in farming.

8. The poorer instructors have earned the most graduate credits in technical and professional courses.

9. The superior group averages \$211.00 higher annual salary than the poorer group.

10. Students in the superior departments have a larger investment in farming.

11. Students of the superior departments have supervised farming programs of larger scope.

12. Students in the superior departments carry more improvement projects.
13. Students in the superior group conduct more supplementary practices.

Practices and Procedures Employed by Superior Instructors

1. Superior instructors obtain a majority of names of prospective students from county superintendents' files.
2. The superior instructors contact more boys on the home farm before school opens or very shortly after.
3. More supervisory visits to the boy's home farm are made by the superior group of teachers.
4. The superior group uses farm surveys much more extensively than does the poorer group.
5. Superior instructors all have minimum standards for project scope. Sixty per cent of the poorer group use no standards.
6. The teachers in the superior group succeed in getting more of the supervised farming projects chosen as a result of conferences with themselves, the boy, and his parents.
7. The instructors in the superior group devote three times as many class periods to launching the supervised farming program as do the instructors of the poorer group.
8. The superior group uses more devices for initiating the supervised farming program with the Agriculture I boys.
9. Superior instructors spend twice as much time helping the boy plan his supervised farming program as do the poorer instructors.
10. Long-time plans are made by 84 per cent of the boys in the superior departments whereas only 52 per cent of students of the poorer group of

instructors plan supervised farming programs on a long-time basis.

11. Superior teachers use many devices to aid in financing the student's supervised project.

12. Group I has four times as many cooperative farming enterprises as the poorer group.

13. Most instructors in the superior group have discontinued the use of prepared diaries for practice project accounting.

14. The superior instructors have several objectives in mind when they make their supervisory visits.

15. Record books are checked by the majority of the superior instructors during the time of visitation.

Deficiencies--There are some good practices employed which are not being used extensively by either group.

1. Neither group is selecting its students carefully enough.

2. Both groups show a deficiency in the number of projects completed.

3. Neither group makes contact with enough of their prospective students before school starts.

4. Both groups fail to establish cooperative relationships among parent, boy and instructor in planning the supervised farming project.

5. Long-time planning is inadequate in both groups.

6. Not enough attention is given to the boy's financial problems in connection with his supervised farming project.

7. The instructors in both groups are lax in the checking of the boy's record books during supervisory visits.

PART V. RECOMMENDATIONS FOR IMPROVING THE
SUPERVISED FARMING PROGRAM IN MONTANA

Improvement of supervised practice programs in vocational agriculture is a promising means of training better farmers. While the program in Montana is probably not inferior to that of other states, some specific recommendations seem to be warranted in the light of weaknesses revealed in this study.

Launching the Supervised Practice Program

It appeared in this study that the superior results were in part obtained by the instructors' efforts to get new students launched on a well-planned, comprehensive program from the very outset of the vocational agriculture course. Even the superior instructors may increase their effectiveness by giving more attention to such practices as are shown in the summary of Part IV.

Recruiting of students before school opens should result in a superior selection of farm boys who need and want vocational training in agriculture. Any of the devices reported in this study may be used, depending on local conditions, but a more careful survey of all possible enrollees can furnish better leads to prospects in many departments. The county superintendent of schools is most certain to have a complete list of prospects.

While the superior instructors have not generally visited home farms of all prospective students before school opened, it is likely that this should be done in all cases. Most instructors have more time

to do this in the summer months than after school opens. This is a good time to take the initial step toward good parent-boy-instructor relationships.

The farming practice to be developed by the boy will depend upon the teacher for direct guidance. In order to help the student succeed in his projects, a competent instructor will:

1. Become personally interested in each individual boy.
2. Develop an interest in the boy toward supervised farming.
3. Learn just what phase of farming the boy is most interested in learning more about.
4. Know what facilities the boy has for carrying a project.
5. Contact the parents and boy and discuss the supervised farming project, and come to some definite conclusions regarding the project.
6. Plan the project with the parents and the boy. Use general statements, followed by detailed job plans, and set up the objectives that will make for a definite goal.
7. Set up a financial estimate of all expenses involved.
8. Carry the final job planning over a period of time.

During the first class meeting, the better instructor will begin to get himself established in the boys' hearts and minds and give them the impression that he cared about them and their future in agriculture. He will show respect for their opinions and talk their language both at work and at play. He will make their problems his own and guide them toward wise solutions. If he has the confidence and good will of his boys, they will not fail him in his purposes.

Sufficient time must be taken to orient the boys in vocational agriculture. They should observe the farming situations in the locality and

discuss the successful and the unsuccessful procedures that prevail. After this, they should make an analysis of the farming results on their home farms. This will lead to wise decisions as to what projects they, as individuals, would like to develop.

As a usual thing, boys generally select a productive project that conforms to the type of farming on the home farm. A conference with the boy and parents will determine the kind of project, its scope and the finances necessary for its operation. When a project is selected which is a part of the home farm program, the instructor must see that the boy realizes his responsibilities. His account book should be evidence of his accomplishments in his supervised practice program.

Quite often there are cases of boys' hearts being set on carrying a project for which the home farm has inadequate facilities. Cooperative planning and financing by the parents, the Future Farmer chapter, the boy and the teacher can often make the desired project possible. To have his first desires made possible does much to instill enthusiasm and zeal in the boy and to bolster the parents' determination to help him to succeed.

Once a boy has become financially involved in a single farming enterprise, it is comparatively easy to lead him toward a full-time farming program. In order to make his project more successful, he will quite naturally conclude that there must be improvements made in it, and supplementary enterprises. The instructor should help him to survey the situations involved in the home farm program and to formulate plans for their improvement. The goals set will eventually lead to an over-all long-time plan and to the improvement of the whole farm.

Evaluating the Supervised Practice Program

The problem of finding a fair method for evaluating vocational agriculture programs is paramount among all vocational educators. The instructors in the departments throughout the State are inquiring of themselves: "How much am I actually achieving? How does my department compare with other departments? Where is my program weak?" The supervisors and the teacher trainers ask, "What standards can be used to determine how effective and adequate are the programs under way?"

The variations in the types of farming in different areas, in the facilities with which to farm and to teach farming, and in the financial status of both the schools and communities make it difficult to compare one department with another. The state supervisor and the instructor in the department should set up objectives and aims for the patronage area which the department is to serve. The same type of objectives may apply in all departments, but the goals should vary with the department, making allowance for the conditions that prevail in the district.

After the objectives have been set up, the instructor should check at the end of each year to see exactly what progress has been made. This will reveal the weaknesses in the program, and enable him to lay plans for correcting them. Year after year, as the department grows more efficient, the objectives may be set for greater achievements.

In order to arrive at an evaluation of the supervised farming program the following criteria are suggested:

	<u>Goals</u>	<u>Results</u>
1. Number of productive projects per boy.	_____	_____
2. Number of improvement projects per boy.	_____	_____
3. Number of supplementary projects per boy.	_____	_____
4. Number of ownership projects of standard scope.	_____	_____
5. Parent, boy, and instructor agreement.	_____	_____
6. Number of owned projects.	_____	_____
7. Number of partnership projects.	_____	_____
8. Number of long-time farming programs.	_____	_____
9. Growth of investments in farming.	_____	_____
10. Financial returns of students.	_____	_____
11. Per cent of projects analyzed for efficiency.	_____	_____
12. Number placed for farm experience.	_____	_____
13. Number established in farming for self.	_____	_____

Graphs and charts that indicate the progress made from year to year would stimulate incentive for growth. The evaluation may lose its purpose if the instructor makes no use of the information in subsequent years.

Among criteria for evaluation, the instructor may well take the following inventory of himself as to supervised practice:

1. How many boys and parents did I contact?
2. What have I done to make them want to farm?
3. What factors have I used to stimulate a desire to progress?
4. What have I done to provide financial assistance?
5. Have I led each student to select his best program?
6. Have I kept close contact and personally encouraged him?

Selection, Training, and Supervision of Vocational Agriculture Instructors

A minimum of two years of farm experience after age 14 has long been required to qualify new teachers of vocational agriculture in Smith-Hughes schools. In this study, it was evident that some instructors did not fully meet this standard. One of the basic principles of vocational education is that the instructor should be occupationally competent. In the case of farming, this means not only farm experience, but preferably the teacher should be farm reared. His possession of essential farm skills should be carefully investigated before he is qualified, and training given in those he lacks.

Better selection of prospective teachers may also come about by greater attention to personality traits which will make for leadership. The trainee should be carefully observed or tested for interest, self-confidence, initiative, dependability, diligence, poise, and other temperament traits. Necessary physical qualifications such as health, fitness, voice and posture should be examined. By careful selection, a good many with poor personalities might be directed toward other fields where their temperament would not be so much of a handicap.

Improvement may be expected in supervised practice by better training in the procedures of supervising. The pre-service training has improved considerably in recent years, but may be made still more effective. Although most new teachers have had fairly adequate classroom training in selecting, planning, budgeting, and supervising farm practice, they do not generally get enough participating experience in making home farm visits to parents and boys during the practice teaching period.

It is natural to expect some men to be more successful than others but those who are not so successful may be helped on the job and through intensive summer courses. The less successful teachers have indicated that they wish to improve, for they have more graduate credits than the superior teachers. They should be encouraged to take further training in courses specially designed to remedy their shortcomings.

Since they have already the technical training required to qualify scholastically, it would seem that the next best way to help them would be in a supervisory way. Adverse criticism does not prove a very effective stimulus unless it is accompanied with suggested plans for improvement. Some of the instructors who have applied self evaluation to their programs have definitely stated that they would appreciate constructive criticism.

When funds make it possible to have an adequate state supervisory staff, the writer suggests that supervisors should spend more time with instructors whose programs are weak. The supervisory staff should be adequate enough so that at least one day a year could be spent in every department. An inoculation of genuine encouragement would help tremendously. If we want boys in the class to do a better piece of work for us, we demonstrate such faith and interest in them and their projects that perseverance becomes their byword. The same ethics could well be applied to instructors by the supervisors of vocational agriculture.

Future Research

There is reason to be proud of the vocational agriculture program in Montana. The progress made in the last decade is well illustrated in the increasing number of schools requesting that a vocational agriculture

department be established in their community. The number of departments has doubled in the last ten years. There are sixty-four established programs in operation within the State.

The supervisors, teacher trainer, and instructors of vocational agriculture are striving to build up the program. They realize that there is room for improvement in every phase of vocational agriculture. This study, as well as others that have been made, is but a part of the effort to determine what is being accomplished. Perhaps not much has been advanced for the improvement of vocational agriculture, but a start has been made.

The data that are available from the sixty-four departments in Montana by way of reports, programs, and statistics sent to the State Department of Vocational Agriculture offer an opportunity that should not be overlooked. There are unlimited possibilities in the reports and summaries now lying dormant in every department. The writer believes that a systematic study of these could do much to correct the many faults and deficiencies now existing. This would not be a cure for all ailments in vocational agriculture, but it would suggest many constructive procedures.

One way that a program of research could be instituted is to delegate the responsibility of collecting data to some one individual. With the assistance and support of the authorities and instructors in the field, a systematic research program could be undertaken. When and if funds make it possible to establish a research division, much value may be realized.

DEPARTMENT OF VOCATIONAL EDUCATION
Bozeman, Montana

Boys in Agriculture I in 1940 to September 1, 1941

I. Practices and procedures of instructor in obtaining home farm relationships.

1. Ways of obtaining names of new, prospective students.

	<u>Check those used</u>	<u>Numbers Obtained</u>
a. Solicited through FFA members	_____	_____
b. Field day, invite 8th graders	_____	_____
c. County Superintendent files	_____	_____
d. Country schools visited	_____	_____
e.	_____	_____
f. Others	_____	_____
g. None	_____	_____

2. How were the boys contacted by the instructor?

	<u>Number of boys contacted</u>
a. Letter	_____
b. Personal visit	_____
c. Met boy at FFA program	_____
d. Not contacted before school opened	_____
e. Other ways	_____
(1)	_____
(2)	_____

3. When was the first visit made to the new students?

	<u>No. boys</u>	<u>Visited boy only</u>	<u>Visited mother and/or father only</u>
a. Before	_____	_____	_____
b. First Week	_____	_____	_____
c. Second week	_____	_____	_____
d. Third Week	_____	_____	_____
e. Fourth Week	_____	_____	_____
f. Late fall	_____	_____	_____
g. Winter	_____	_____	_____
h. Spring	_____	_____	_____
i. Next summer	_____	_____	_____
j. None	_____	_____	_____
k.	_____	_____	_____

4. Total number of visits to 1940 agriculture students up to
September 1941(Ag I) _____

II. Teaching procedures used in launching Supervised Farming Programs. (All questions relate to the school year 1940-41)

- When were supervised farming programs first discussed with the Ag I class of 1940 in school? 1st mo. 2nd mo. 3rd mo. winter spring
- What methods were used in introducing the supervised farming program?

a. F.F.A. meetings devoted to supervise farming.
Was this done? _____. How many times? _____.
How much time given? _____. Underline as to value: super-
ior average poor

b. Were F.F.A. officers invited to talk before the class?
Was this done? _____. How many times? _____. How much
time was given? _____. Underline as to value: supervisor
average poor

c. Instructor's explanation.
Was this done? _____. How many times? _____. How much
time was given? _____. Underline as to value: superior
average good

d. Were freshmen given old record books to look over? _____.
How much class time given? _____ Month? _____

e. Did the freshmen have any discussion and study with efficiency
factors from your own or from state data?
Was this done? _____. How many times? _____. How
much time was given? _____. Month? _____.
Rate as to value: superior average good

f. Project tours for freshmen.
Was this done? _____. How many times? _____.
How much time was given? _____. When Held? _____.
Rate as to value: superior average good

g. Any other means used in introducing the supervised farming program.

- (1)
- (2)
- (3)

3. Total number of class days used for introducing the supervised farm-
ing program. _____.

4. Practice record keeping to freshmen.

a. Do you use it? Yes ____ No ____

b. When given (date) _____

c. How much time allowed _____

d. Do you have the boys' practice record work from a prepared diary? ____

e. Other methods:

- (1)
- (2)
- (3)

5. Project planning with freshmen

a. Do you have each boy make a general statement (written)? _____

b. Are preliminary financial estimates made? _____

c. Are written job plans made in detail? _____

d. Are objectives (standards and goals) set up in plan? _____

a. Farm surveys taken on each boy's home farm.
How many places? _____. Amount of time allowed? _____

(1) Were parents, boy and instructor together? _____ How many? _____
 (2) Boy decided alone? _____. How many boys? _____
 (3) Parents and boy decided? _____. How many? _____

Autumn _____ Winter _____ Spring _____

How many Agr I freshmen made long-time plans? _____
Rate as to value: superior average good

a. Revolving FFA projects: Yes _____ No _____

(1) What kinds: _____ How many: _____

_____ How many: _____

_____ How many: _____

(1) How many _____ Average per boy _____

(1) How much: _____ How many boys _____

(2) Terms _____

(1) How many: _____

- (1)
- (2)

a. List type of award. b. On what terms are awards based:

[illegible]

III. General Questions

1. How many Agr I students did you have in 1940? _____
2. How many are farm boys? _____. How many town boys? _____
3. Are the Agr I students alone in one class? _____ Length of period _____
4. How many boys in all-day classes? (total number) _____
Agr I _____ All _____
5. What is the average investment in farming per boy? _____
6. Do you use the Montana minimum standards for project size:
With all boys _____
If Partially, give per cent _____
Do not use this _____
Any other standard _____
7. What credit (school) given for vocational agriculture classes? _____
What additional credit is given for project work? _____
8. Rate the following (your own opinion on the basis of 100 for the most important with the others corresponding)
a. F.F.A. _____
b. Shop _____
c. Supervised farming _____
d. Classwork _____
9. Is mileage sufficient? Yes _____ No _____
10. Do you use the Montana record book? Yes _____ No _____
11. Do boys keep diaries during the summer? Yes _____ No _____
12. Do you check book each visit? Yes _____ No _____
13. Do you leave written or verbal instructions? Written _____ Verbal _____

Rate the following objectives for your own supervised farming program.

	Scoring
1. To establish boys in farming.	_____
2. To improve farming methods used on the individuals home farm and community.	_____
3. To help the teacher get experience in farming.	_____
4. To satisfy state and national requirements.	_____
5. To test classroom teaching.	_____
6. To try out experiments in production methods to determine correct procedure.	_____
7. To help the farm boy find the type of farming in which he has the greatest ability.	_____
8. To develop cooperative activities.	_____
9. To use as a teaching situation.	_____
10. To develop the ability to market farm products.	_____
11. To help increase the boys interest in class work.	_____
12. To contribute to the efficiency of the farm business as a whole.	_____
13. To develop managerial abilities to balance manip- ulative abilities normally learned on the farm.	_____
14. To contribute to improved living conditions on the home farm.	_____
15. To develop methods of economical production.	_____
16. To provide a means of earning for the farm boy.	_____
17. To develop an interest in farming as an occupation.	_____

Place each one of the above in scoring column at right according to the following:

Key: Most important or major	score column 5
Less important	score column 4
Average value	score column 3
Slight consideration or value	score column 2
Not considered or used	score column 1

Cooperative activities of boys

Three groups of marketing, buying, and production. If the one organization does all three, check each one, naming the type of cooperative as hog marketing and hog buying?

Cooperative marketing	
Kinds _____	_____
_____	_____
Cooperative buying	
Kinds _____	_____
_____	_____
Cooperative production (seed, etc.)	
Kinds _____	_____
_____	_____

Practices employed by instructors to develop interest in Supervised Farming
(check those used with 1940 Agr I boys)

1. Project tours _____
2. Showing at Fairs _____
3. Promotion in F.F.A. _____
4. Publish accounts of projects in papers. _____
5. Give extra credit. _____
6. Project tours for parents. _____
7. Radio programs. _____
8. Display pictures of projects to public. _____
9. Display charts of record progress in supervised farming _____
10. Others _____
 - (a) _____
 - (b) _____

Purposes of supervisory visits

1. Improve the prestige of the Vo-Ag dep't. in the community. _____
2. Take pictures _____
3. Check students other activities. _____
4. Assist with farmer problems. _____
5. Check records. _____
6. Make new plans. _____
7. Improve the good will of parents. _____
8. Check project methods. _____
9. Assist with supervised farming problems. _____
10. Encourage boys and increase interest. _____
11. Exhibits for fairs. _____

Vocational Agriculture Instructor's farming status

1. Farming experience
 - a. Place of birth _____ Farm, village, city. (underline)
 - b. Were you a student of vo-ag in High School? Yes _____ No _____
 - c. Were you a member of the F.F.A.? Yes _____ No _____
 - d. Farm experience prior to college.
 - Farm manager _____
 - Farm laborer _____
 - Home farm _____
 - Owner-operator _____
 - Farm tenant _____
 - e. Present farming status
 - Some investment _____
 - Helping to manage _____
 - Renting _____
 - Living on a farm _____

Montana State Board For Vocational Education
Vocational Agriculture Department
Bozeman, Montana

Final Report on Supervised Farming Program
All-Day Students

Department

Date Completed

Instructor

INSTRUCTIONS

This report is to be filled out in duplicate, one copy to be forwarded to the State Department and the other kept in the local department files. The report must be mailed not later than January 15 for the preceding year's work.

DEFINITION OF TERMS

Productive enterprise project: A business venture for profit, usually limited to a production cycle in a farm enterprise.

Improvement project: A project intended to increase appreciably the real estate value of the farm, or improve the efficiency of the farm business. It is usually of greater scope than a "job" or an "improved practice." Examples: draining a field, renovating an orchard, keeping a set of farm accounts.

Supplementary farm practice: Practice which has as its purpose development of ability in certain jobs or practices carefully selected by the teacher in conference with the student. These jobs or practices are more restricted in scope than improvement projects. Examples: culling the poultry flock, treating oats for smut, dipping sheep.

Placement for farm experience: Placement of a student on a farm--usually a town boy--who is lacking in farm experience or transfer to a suitable farm of a student who has too limited facilities on his home farm. The placement of such students on farms, and the follow-up of their programs is a responsibility of the teacher of agriculture.

SUMMARIZED FINAL REPORT ON EACH
PRODUCTION ENTER

	Course Agr.1. Age2,3,4. (2)	Kind of en- terprise (4)	Unit (Acres, head, etc.) (5)	Scope (Total No. of units) (6)	Yield(bu. tons, lbs. etc.) (7)	Total Credits (8)
(Sample)					150 lbs. wool 20	
John Doe	15	2	ewe & lamb	head	15 lambs	\$100
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
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34.						
35.						
36.						
37.						
38.						
39.						
40.						

STUDENT'S FARMING PROGRAM
PRIZE PROJECTS

OTHER
SUPERVISED PRACTICE

[illegible]

SUMMARIZED FINAL REPORT ON PRODUCTIVE ENTERPRISE PROJECTS

STUDENT'S PROJECT INCOME

Productive Enterprise Projects	No. begun	No. comp- leted	Total Scope (6)	Total Yield (7)	Stand- ard of Effec iency	Total Receipts (8)	Total Charges (9)	Net Profit (10)	Allowed for self labor (11)	Total project income (12)
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										

SUMMARIZED FINAL REPORT ON OTHER SUPERVISED PRACTICE

a. IMPROVEMENT PROJECTS (List Projects)	No. of project		Unit (Acres, head, etc.)	Scope (Total No. of Units)	b. SUPPLEMENTARY FARM PRACTICES (List practices of greatest frequency)	No. of projects	
	Begun	Comp.				Begun	Comp.
1.					1.		
2.					2.		
3.					3.		
4.					4.		
5.					5.		
6.					6.		
7.					7.		
8.					8.		
9.					9.		
10.							
11.							
12.							
					c. PLACEMENTS FOR FARM EXP.	Begun	Comp.
					TOTAL INVESTMENT IN FARMING	\$	

ACKNOWLEDGMENTS

The writer would particularly like to express his thanks and sincere appreciation to Professor R. H. Palmer for his guidance and assistance in all phases of this study.

To the members of the thesis committee, the graduate committee, and the vocational agriculture instructors, the writer expresses his thanks for their cooperation.

Hubert E. Rodeberg

May, 1942

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