OUR COVER

University F.F.A. Formed at Missouri

CECIL BARGER, Publicity Manager

THE first Future Farmers of America chapter of its kind was organized last year at the University of Missouri. There are other collegiate chapters, about seven in all, in the United States, but they include in their membership only those boys majoring in agricultural education. The recently organized University of Missouri chapter of Future Farmers of America is the only one to include all former F. F. A.'s, as well as those boys majoring in agricultural education, in its membership.

Distinction or originality was not, however, the idea which the boys had in mind. They felt that the organization could serve a definite purpose and that its activities could be important enough to merit a place on the University of Missouri campus. About 55 percent of the enrollment of the Missouri College of Agriculture had been F. F. A.'s in high school, and it was felt that an organization of these boys could be of vast benefits to the college, to the F. F. A. organization as a whole, and to the boys themselves.

A movement to start the new chapter had been under consideration for several months prior to its organization. Six of the eleven officers of the Missouri Association of Future Farmers of America are enrolled in the Missouri College of Agriculture, and it was mainly thru the efforts of these boys that the movement gained impetus.

Membership consists of three forms—active, associate, and honorary. Active membership includes all students who have been F. F. A.'s in high school. Associate membership is given to those students majoring in agricultural education. Honorary membership may be extended to any person deemed worthy by the vote of the chapter.

Two ranks are provided for among the active members—Junior Farmer and Senior Farmer. All members enter as Junior Farmers, and then by acquiring 100 points in service to the chapter, they can become Senior Farmers. A scale of points for each activity is to be formulated by the executive committee. Only Senior Farmers are allowed to hold office.

Officers consist of those commonly found in any organization, with an advisory committee of three, making a total of eleven men who sit as an executive committee. They hold office for one year. Meetings are to be held four times during a semester.

More than 60 attended the initial meeting, and others are expected to affiliate. Of the number comprising the original membership, four are American Farmers (three Star Farmers) and 19 are State Farmers.

The primary purpose of the new chapter, as set forth in the constitution, is "to promote a continuation of friendships and common aspirations initiated thru association as Future Farmers." The chapter intends to encourage F. F. A. leaders to enter the university and contemplates lending financial assist-

F. A. periodical and aiding to sponsor the state vocational agriculture spring conference and contests. The chapter expects to be of great assistance to the state and national associations of Future Farmers of America.

Specific activities discussed at the meeting included acting as hosts to visiting high school vocational agriculture students, particularly in connection with the annual state F. F. A. dinner; welcoming freshmen F. F. A.'s to the university in the fall; promoting fellowship and friendship; and providing entertainment and supplementary educational opportunities.

The Value of a Community Cannery

(Continued from page 37)

ing of its farmers. When this standard is more nearly ideal, everyone is more contented and has the co-operative spirit which is so necessary for the welfare of any community.

Value to the School

A cannery serves as a direct connecting link between school and patron. Here is a service which the patron can appreciate. He sees directly wherein he is benefited. The contacts made at the cannery allow him to see what his neighbors are doing. He actually learns to can while doing this job under supervision. The actual work of selecting, preparing, and canning under an instructor is highly educational. These steps are as essential or more so than simply knowing how to produce in our present farm system. Today and tomorrow, the preservation of food will receive more of the farmer's real thought than production did in the past.

Value to the Teacher

The cannery is of great value to the community, to the school, to the farmer, but probably it is of still greater importance to the teacher of agriculture. It allows him to contact and render service to many who no doubt need his help most, and who would not otherwise be reached. It is the duty of every vocational teacher to serve his community, and probably there is no greater service we can do at this time than to teach our farmers the preservation of food.

Today our agriculture is undergoing a tremendous change. Just what it will be tomorrow we can't truthfully predict, but of this one thing we are certain—man must continue to produce food. For a long, long period he has mastered this art fairly well. Now he has reached a point where the mastery of food preservation must be attained, or he is destined to be an ultimate failure. A good agricultural teaching program can be built around our canneries tied in closely with a well rounded live-at-home program. It is our duty to give such a program to our farmers. A live-at-home program is incomplete without a cannery, but the two carried on as a single unit will mean much to the farmers in any community.

Strutting in Both Directions

Washington—The Pomeroy Chapter had two important events this spring: A combined Kid-Brother and Father-Son Banquet and an agricultural party to

CALL FOR CONVENTION

TO MEMBERS OF THE FUTURE FARMERS OF AMERICA:

As National President of the Future Farmers of America, I am issuing a call for the Ninth National Convention of the organization to be held at the Baltimore Hotel in Kansas City, Missouri, October 19th to 22nd, 1936 at the time of the American Royal Livestock Show.

Chartered associations of F. F. A., in good standing with the national organizations, are entitled to two delegates each. The officers of such associations are requested to make immediate plans for official representation and to urge other members and friends to attend the convention. May we have full and complete representation at the Ninth National Convention in order to transact the necessary business and to lay definite plans for our "Tenth Anniversary" to be observed in 1937.

WILLIAM SHAFFER,
President

Maurertown, Virginia
April 14, 1936

Co-operation With Local Editor

Louisiana—"A word of appreciation to the local newspaper editor makes for better co-operation," says L. L. Price, local Adviser of Ida Chapter, Louisiana. The Ida Chapter dedicated its third issue of the Chapter News Letter to the editor of the local newspaper, who for a period of years has kept the "home fires burning."

The Thrift Bank

Tennessee—The John Sevier chapter at Erwin set their thrift bank quota for February at $30. Each agricultural class has elected its own cashier. Their aim is to have an average of $10.00 per student in the thrift bank, and the object of the thrift bank is to teach systematic saving.

F. F. A. Boy Realizes Good Profit From Poultry Enterprise

(Continued from page 41)

performed about 300 hours of work in addition to school work when school was in session.

In summarizing the enterprise results we find the following:

Total receipts (from sale of broilers)	$756.59
Total expenses (includes feed, disinfectant, $12 rent on brooder per month, labor, etc.)	542.85
Total net profit	213.74
Paid self for labor (self labor included in expenses at 15 cents per hour)	43.80
Total project income	$257.54
Losses	Less than 5 percent

Oscar had the complete backing of his father in carrying out his enterprise, and much valuable assistance was rendered by him during the enterprise. Also, thru this project Oscar added some valuable experience to his store of knowledge, and from his records he can pick out the weak places in his enterprise and thereby

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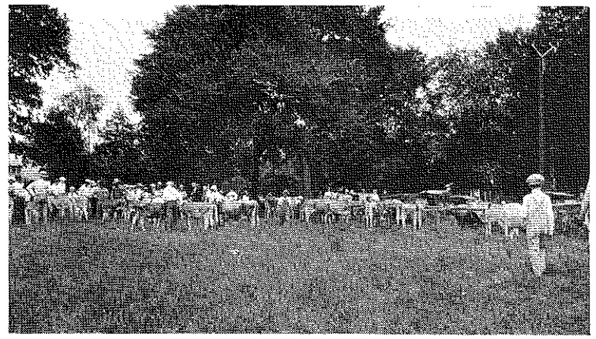
Agricultural Education



A Corner of the Exhibit Lot on Dardanelle Dairy Day

(See page 61)

"Talent is Built in Solitude; Character in the Stream of the World."—Goethe

EDITORIAL COMMENT

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WHAT USE RESEARCH IN AGRICULTURAL EDUCATION?

SURELY among agricultural education workers it is not amiss to ask the question, "What Use Research?" Or is it? There are those who are so busy and practical that they want very little of it. They are too busy to carry out research—even too busy to read what others have produced. They are all for practicality. Unless the findings of a study dovetail right into their own pre-conceived notions as to procedures (procedures that they have been following for many years), then they will wave it aside with, "It is theoretical," "That is not our problem," "It does not apply here."

The recent appearance of Federal Vocational Education Bulletin No. 180—summaries of 373 studies in agricultural education—is an important milestone in agricultural education. In the main, we should be quite proud. Naturally to many, there are serious gaps—important problems not yet studied. Some completed studies are poorly done so that they furnish poor guides to action. Yet the important thing is that a good beginning has been made.

The writer has a deep conviction, growing out of considerable contact with vocational agriculture work, having observed scores of vocational agriculture lessons, that one of the chief aims in vocational agriculture should be to develop in boys the desire for facts from scientific studies in order to solve their farm problems and to develop the habit of looking for such facts whenever these problems arise. Agricultural colleges with their experiment stations and published bulletins have much to contribute. And yet, over and over again,I have seen boys in classes discuss whether this or that was the best way to do a job—with the teacher apparently doing little or nothing to equip the boys with scientific facts with which they could really think out and solve their problem. Oh yes, I believe in pooled experiences in such cases, but the boys need that and something more. Sometimes we let a spurious notion of what is "practical" substitute for a genuine attack on our problem. The instructor allows the boys to magnify the importance of their experience (usually it is so much easier to sit and argue than to dig out significant facts) and to crowd out attention to scientific facts on their farm problems available right there in the departmental library. Mere argument will not settle the problem of whether or not to grind grains for dairy cows. Dairy references and bulletins will supply the scientific answer.

Now let us apply this same principle to the teacher in his teaching, organizing, and managing of an agricultural department, to the state supervisor in his work and contacts with the local high school departments of agriculture, and to the teacher-trainers with their problems. Are they intelligent consumers of research? Do they, too, expect to solve are they willing to *carefully* analyze known and available studies on "How Vocational Agriculture Teachers Distribute Their Time," "Effectiveness of Evening School Work," or any others—and deliberately try to apply the findings to their situation, making the necessary allowance because the study was made in another state? Some expect too much of the research. They expect the author of the research, or even the study itself, to make its own application. That, of course, is unreasonable. It is the teacher, the state supervisors, and the teacher-trainers who will have to be the active agent in applying the known principles and results of the studies made.

We need have no fear but what research in agricultural education will grow in quantity and improve in quality. Probably enough is now rather definitely known thru these researches to revolutionize vocational education in agriculture if we would carefully study them with the idea of applying the facts to our problems. A casual check of this new bulletin shows at least 43 studies touching very closely the work of the state supervisor and 28 studies relating to the work of the teacher-trainer. Of course, both groups are interested in a general way in all the studies.

Just as we expect the vocational student to apply known scientific facts to his farm problems, so should we make a genuine effort to apply the known scientific facts to our educational problems.—C. R. W.

LEADERSHIP AND ENTHUSIASM

ONE of the major requisites for a teacher to become a leader with his boys is to develop and display wholehearted enthusiasm for his work. Enthusiasm is the same as loyalty. To be a leader requires something more than pretense; it requires loyalty and enthusiasm for one's work which is deeply rooted because of a love for that work. It has been said, "Leaders have betrayed their followers and still retained their leadership, but when they betray the cause in which they are leaders, they are done for."

The teacher must first get a vision of his teaching work; that is, he must see the bigger and more important things which are possible over a period of years with individuals and the community. The kind of vision I mean is that depicted by Reuben Smith, a vocational agriculture instructor, in the book entitled, *Romance of Poverty Hollow*.

Enthusiasm is something which is contagious. The boy will catch it when it is displayed prominently by his teacher. A car needs a battery. The battery supplies the spark to start the car. A boy needs a spark of enthusiasm to get him started. Usually this spark comes from the teacher. Some boys only need starting once while others need to be supplied with a continuous spark for a longer period of time.

No one has ever seen a leader, in any cause or undertaking, who was not filled with enthusiasm for that cause. The agriculture teacher must live his work, feel it, talk it, show it, and love it. It is in this way that he develops confidence, the boys develop confidence, and the community develops confidence in the vocational agriculture program.

If boys are slow to do their work, slow and careless in keeping records, preparing plans, and making reports, the teacher should stop and take inventory of himself to see whether he has any of these same habits. My observation has been that whenever a teacher attends to these details, promptly, neatly, and accurately, the majority of the boys develop these same good habits.

When a teacher is energetic; prepares his lessons carefully and well; does other things such as growing a garden which the whole community looks at with appreciation and pride; raises chicks, chickens, or turkeys in an efficient manner; keeps a set of records which are an example to the boys; and does many other things which reflect credit, then he will have students who will be filled with enthusiasm to achieve because they want to be like their leader.

It is well for a teacher to stop and reflect upon the qualities of leadership. Try to analyze the way he does things, analyze the results obtained, think of ways and means for mak-

Professional

Whither Agricultural Education in the Course of Study?

A. M. FIELD, Professor of Agricultural Education, University of Minnesota, St. Paul, Minnesota

THE construction of the course of study with an appropriate farm practice program is a problem of supreme importance in teaching agriculture on a vocational basis. There is, perhaps, no other place in the total field of public school education where the teacher's point of view with regard to the course of study is so vital to success as it is in agriculture. The success of the students as future farmers is highly conditioned by the study and the long-time plans that are made in the agriculture classes. It is, therefore, important that the course of study be made to serve the needs of those who are using it as a preparation for making a living and living a life as a farmer.

Explanation of Terms

There is frequently a confusion in the minds of teachers in regard to the meaning of certain terms that are used in the literature dealing with the so-called curriculum. In this discussion the following concepts will prevail:

The school offering embodies all the school subjects, activities, and learning experiences provided by the school. The objective is to serve the community.

The curriculum is a special group of subjects, activities, and learning experiences designed to meet the needs of a special group in the community. For example: the program of school offerings may include a science curriculum, a college preparatory curriculum, or a curriculum in agriculture designed especially for those who plan to enter the farming occupations.

The course of study refers to the learning materials, the activities, and the total experiences of students in a special subject or area of learning. For example: in the agriculture curriculum a special field of study is agriculture. All of the time and all of the activities pertaining to this special field constitute the course of study in agriculture. In the secondary school this may be one, two, three, or four years in length for a school. If a school provides four years of instruction in agriculture, the course of study in agriculture should be organized as a unit to represent an appropriate selection of content, distributed in a suitable sequence to meet the needs of individual students over a four-year period. It should be conceived as a body of subject matter, activities, and experiences designed to develop appropriate attitudes, habits, and knowledge distributed over a unit period of 48 months instead of the usual four units of one school year for each unit.

A Philosophy for Agricultural Education

The philosophy of agricultural education should be comprehensive in scope and should have proved its worth by being derived from extensive experience. It should be widely accepted and of sufficient scope to meet all situations. It should meet the present needs of the group served and should project into the future so that it may serve as a guide in a changing agriculture. Consistent with the above criteria, the following basic philosophy is suggested as guiding principles in the program for teaching agriculture on a vocational basis.

1. In teaching agriculture emphasis is put on the needs of the student rather than on the subject matter to be taught.

Subject matter in itself has little value unless it contributes to the present and potential needs of the individual. It is essential that the subject matter for the course of study in agriculture be determined by the needs of the boys in the community, and not by the content in books and other agriculture literature. In the selection of subject matter recognition is given to individual student needs, individual farm needs, and individual community needs.

In determining the needs of students, recognition is given to the fact that farm folk are engaged in the process of living a life as well as making a living. Adequate provision is therefore made for the development of appropriate social and recreational activities. The power to live a satisfying life is as essential to success in farming as it is in any other occupation.

2. The personal development of the students is placed above the acquisition of facts or the skillful performance of manipulative activities.

The teacher of agriculture recognizes the fact that individuals must be changed before practices are changed. Therefore, education should be rooted in a sound philosophy as a point of departure. The program of education should then take the students thru a series of appropriate experiences and activities going from where they are to where they probably will be, or ought to be, as adult farmers sometime in the future. Education in agriculture must peer into the future if it is to maintain a worthy leadership for youth. The philosophy of agricultural education must be a philosophy of change. It must change more rapidly than agricultural practices, otherwise it cannot lead. The students who are in training today are going to do most of their farming in the future. Therefore, agricultural education must catch the problems of the future in its philosophy of today.

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The teacher of agriculture recognizes the fact that individuals must be changed before practices are changed. Therefore, than in what the student does to the subject matter in the learning process. People must be changed before practices are changed.

The development of attitudes, ideals, interests, and the gaining of experiences on appropriate ability levels is given preference and precedence to the mere learning of facts and other knowledge accumulative activities. The chief objective of the teacher is to develop improved boys with reference to the ability to think in terms of the problems and activities of agriculture. The seat of good farming is in the mind; to be good farmers the boys must think good farming. The improvement of agricultural practices in a community is a natural outcome of the work with the boys. For example: a good teacher will not measure his success in terms of the increase in the number of purebred pigs, acres of alfalfa, or high producing dairy cows in the community, but in terms of the improvement and changes that are made in the students or the people in the community.

3. Agricultural education is democratic in its service to the people in a community.

The program of teaching agriculture serves all classes and all levels of intelligence in a community. The reason for this is that the program for teaching agriculture is developed on the basis of serving the individual needs of the students. There is no intellectual, social, or economic aristocracy as far as the instructors in agriculture are concerned. Each student is served according to his interest, needs, ability to understand, and opportunity to practice. In time the program for teaching agriculture should raise the farm population to the highest social and economic level its ability will permit.

In Retrospect

The theme "Wither Agricultural Education?" carries the impression that changes have occurred or should occur in the program for teaching agriculture. Progressive changes have been made in all phases of the total program for teaching agriculture. The chief concern of this brief story is with the direction of progress in the course of study for the so-called all-day instruction in the secondary schools. The organization followed during the early years after the passage of the Federal Vocational Education Act in 1917 was in general as follows:

First year—crop production
Second year—animal production
Third year—farm mechanics or special enterprises

Naturally there were many modifications of the above "vertical" arrangement, but it serves to give a general pattern of the set-up in the various states. When one considers the function of instruction in agriculture as that of preparing young men for the business of farming there arises some question as to whether the traditional organization serves to the fullest extent the purpose of vocational instruction in agriculture. Reference to the objectives presented in the previous articles in this series leads one to conclude that this initial type of organization does not fully meet the requirements of a teaching program designed to serve the needs of individual students. Farming is not carried on "in general" in the community, but is confined to specific farms. Farming on these specific farms is not departmentalized into groups of enterprises or years of performance. The entire business with all its varied activities is carried on as an integrated whole. Each activity is planned and operated in its relationship to all the other activities. In view of the above concept the following criteria are suggested as guiding principles in organizing the course of study for teaching agriculture.

1. The set-up for teaching agriculture should be consistent with the "way a farmer farms."

Farmers do not raise crops one year, livestock the next, and finally plan the management activities. Success in farming comes from a well integrated type of farming set-up that is carefully planned and operated according to accepted factors in successful farm management.

2. The materials to be studied each year of the agriculture course should be within the range of interest, ability, need, and opportunity for practice of individual students.

Teaching all the materials for any enterprise in one year assumes that the students have the mental ability, the interests, and the experiences necessary to master all the information for the enterprise without regard for the range of difficulty or immediate need for the material. Good selection and distribution of content for the course of study in agriculture places emphasis on appropriate material that the boy can learn and practice instead of what the teacher can or wants to teach. Abstract, technical, and unifying materials should come late in the course of study where the students have the maturity and experience to understand them.

3. Emphasis should be placed on teaching boys how to farm rather than on learning subject matter about farming.

Books and bulletins should be used as sources of information helpful in the solution of individual problems that arise from the home farm activities of each boy. This point of view regards the printed materials as a means to an end rather than an end in itself. The real purpose of the course of study in vocational agriculture is not to teach matter but to prepare students for proficiency in the farming occupations.

4. Individual instruction and learning should be emphasized by directing the attention of each student to the problems on the home farm.

be recognized as well as individual differences in students. Group instruction tends to place emphasis on a superficial, lock-step study by all students on a wide variety of enterprises. Individual study places emphasis on materials actually needed by each student.

5. Farm management and the business side of farming should receive appropriate attention thruout the entire course of study.

Farm management is so intimately associated with all farm activities that it should be integrated with the study activities and practices thruout the entire period of study. All students need it and it should not be relegated to the senior year when many of the students have dropped out.

6. The set-up for the course of study should encourage an appropriate farm practice program and long-time planning.

The fundamental purpose of the instruction in agriculture is to prepare young men for the occupation of farming. The farm practice activities of the student constitute an important part of the training. If the program of study is built around the student's home farm it will stimulate him to combine his study and practice in the most satisfactory manner. The set-up for the course of study is an important factor in making possible a farm practice program that will not only provide appropriate practice experiences, but will also pave the way for actual entrance to farming. The farm practice activities of the student cannot be considered apart from the study program. The farm practice work of the student is an integral part of his course of study and not an appendage attached as a separate and special requirement. In developing the farm practice activities less emphasis should be given to the so-called projects and more time devoted to the problems of building a strong *apprenticeship with dad's* program on the approved practice basis.

7. The course of study set-up should leave each student with an appropriate pattern of the type of farming for the home farm at whatever stage he might leave schools.

The boy who devotes the entire first year to a study of crops does not gain a good idea of a well planned farm business if he leaves school after one year. Neither will the teacher have a good basis for follow-up work with the boy.

8. Exploration, counseling, and occupational choice should precede specialization and occupational preparation.

The trend in the philosophy of education is to provide adequate opportunity for exploration and counseling as a basis for choosing an occupation. This has come to be recognized as an important function of the junior high school. The first year of study in agriculture is usually the last year of the junior high school period. Therefore, the first year of the course of study seems an appropriate place to give attention to orientation activities, individual interests, aptitudes, occupational exploration, and occupational counseling. The farm practice activities may serve a useful purpose in helping students to determine the type of farming to enter.

The Integrated Course of Study

The teaching agriculture appears to be in the direction of and consistent with the principles just set forth. There is a tendency to break away from the former plan of teaching all of the crop enterprises in one year, the animal enterprises in another year, and the farm management in still another year. Instead the course of study material is organized, taught, or studied the way a farmer farms. The materials of instruction are organized in an integrated sequence so that enterprises may be studied over a period of more than one year. Such factors as ability of the student, interest, opportunity for practice, difficulty of subject matter, immediate need, repetitive training need, and prerequisite value would serve as criteria for the selection and the distribution of content. The plan whereby the attitudes, practices, and knowledges for each enterprise are distributed so as to be taught or developed over a period of more than one year is sometimes referred to as the "cross-section" or "horizontal" method of organizing the course of study. The complex interrelationships of the activities in a well-planned farm business suggest the term *integrated* as a more meaningful concept descriptive of the trend in the course of study organization. The point of view in the set-up for the integrated course of study in agriculture may be clarified by an illustration. Let the teacher assume that his problem is to select and organize a one year course of study in agriculture. He would select and distribute what in his judgment appears to be the most essential and appropriate materials from the enterprises on the home farms of the boys. An appropriate farm practice program would be developed as an integral part of the course of study.

With this concept in mind the integrated course of study is constructed by proceeding to the process of expanding the study materials and the farm practice activities to a unit four years in length instead of one year. The fact that the secondary school is organized on a four-year basis may make it necessary to recognize the need for providing a method of reporting a grade for each year of the integrated agriculture course. This can be done by labeling the material covered each succeeding year as Agriculture I, Agriculture II, Agriculture III, and Agriculture IV. The problem of the teacher becomes one of selecting and distributing the materials of instruction and practice for each enterprise over a period of one or more years. For example: if dairying is a major enterprise in the community, the study materials and the farm practice activities would perhaps be distributed over the entire four years of the course of study.

The problems involved in selecting and distributing the subject matter, and the problems of co-ordinating the content and the farm practice program are too many to be included in the limited space allotted for this article. The concept is an answer to the question "Wither Agricultural Education?" in the course of study. Grasping the meaning or concept of the integrated course of study philosophy is a matter of careful thought and study. Accepting it, wholly or in part, is a problem of attitude and a willingness to break with tradition. Putting it into practice depends on the individual teach-

Professor Gregory Takes Over New Work

R. W. Gregory

PROFESSOR R. W. Gregory, of the agricultural education staff at Purdue University, Lafayette, Indiana, took over his new duties as Specialist in Agricultural Education in Part-Time and Evening School Work with the United States Office of Education on September first.

Professor Gregory received his high school training in Indiana and was graduated from Purdue University in 1917. He taught vocational agriculture at Mooresville, Indiana, for five years. In 1923, he entered Cornell University to do graduate work towards his advanced degrees.

For the past twelve years he has been associated with the agricultural education staff at Purdue University in the capacity of assistant state supervisor and itinerant teacher trainer.

Professor Gregory has been actively engaged and instrumental in building up the vocational agricultural program in Indiana. The state's loss of his valuable services is compensated by the fact that he will extend his duties over a wider area, and all who know him will welcome him into his new line of work.

He needs no introduction to the administrative staffs in vocational agriculture because he has served well the program of agricultural education thru his activities as chairman or member of many committees, not only of State and Regional, but also of the American Vocational Association. For six years he served as chairman of the publication committee of the American Vocational Association and was editor of the News Bulletin. For three years he served on the program committee for the agricul-

(Continued on page 64)

D. M. Clements

D. M. Clements

MR. Clements is now connected with the United States Office of Education as regional agent for vocational agriculture in the southern states.

Mr. Clements, for the past twelve years, has been state supervisor of agricultural education in Tennessee. Many readers of the magazine are acquainted with the development of the agricultural program in the state and especially the Future Farmers of America program. Tennessee was one of the first states to sponsor a state F.F.A. camp.

We are glad to have Mr. Clements take over this larger field of activity and

Adapting Vocational Agriculture to the Community

CHARLES PAINTER, Teacher, Lemmon, South Dakota

EACH year of my teaching experience brings problems that will not yield to the magic of a degree. Neither can I find their solution in my college texts or notebooks. I have taught vocational agriculture in three communities in the Dakotas, all vastly different in their agriculture. Two communities less than one hundred miles apart may differ materially in their agriculture. Wheat may be correctly considered the major crop of North Dakota, yet Park River is nationally famous for its seed potatoes. New Salem in the same state is a noted dairy section, whereas surrounding communities devote their energies to ranching or wheat production.

The primary factors in determining success are the individual himself and his ability to adapt himself to his surroundings. This year northwest South Dakota has four new vocational agriculture departments. So far as I know there has been but one such department in this territory before and that for only a few years in the early days of vocational agriculture. Some may question that there is a justification for such work here. People live here and will continue to do so, and their livelihood is based on a certain kind of agriculture. The problem is to build a program based on the needs of the area. That requires careful observation and sound judgment.

In my own department I use perhaps forty percent of the information I received from my college training. The rest is what I have gathered in the past eight years of work or am picking up as I go along. If this department fails, I have a sneaking suspicion that the cause will be that I did not pick up enough to eliminate another twenty percent of what I started with in 1928. I do not wish to be misunderstood. General principles gained from college form an essential background for all secondary teaching, but from a standpoint of subject matter alone there is little in my training that is definitely related to this community.

We never studied about turkeys when I was in school, yet there are decided possibilities for this enterprise here and in much of the territory to the north.

When I came to my present location I anticipated a strictly ranch community. My observations do not bear this out in full. The semi-arid West seems quite generally to be a strange confusion of the permanent stock-production type of agriculture, the hazardous cash-crop farming, and sidewalk promoted dairy and hog industries. Occasionally a one hundred-sixty-acre farm is found. As yet I have been unable to determine how those who live on them exist. The farm that produces from five to seven litters of hogs is not uncommon. Dairy herds occasionally run from fifteen to twenty cows. Strictly cash-crop farming has its intervals of popularity. None of these enterprises I have just mentioned is strictly adapted to this community. Our "one good crop in four" climate makes cash-crop production a gamble. Since both hogs and dairy cattle are dependent upon grain crops for feed, they too are

agriculture must tactfully accept temporarily the agriculture we find here, our goal should be to eventually build up an agricultural industry based on principles that insure permanence. The agriculture of the West has not yet assumed these proportions as have older communities. The agriculture of the West is still characterized by reckless plunging—a desire to make a killing and leave. The mere fact that the killing is seldom made is only one undesirable factor. The fact that people do not build up homes or consider the future welfare of the community is far more serious. Much of our own responsibility here centers around the home and home planning. I cannot cover this topic in a few short sentences, but I will say that the planting of trees, the farm garden, and the repair of farm buildings have a direct influence on thinking ahead.

A vocational agriculture teacher in a humid region finds his major task that of adapting his program to the enterprises found in the community. We who teach here must attempt to weed out and add enterprises—in other words, build the agriculture for the community.

Livestock-feeding, as an animal study, probably ranks first in importance in this area. Under this, of course, we would include the production of feeds as well as feeding. Feed production would logically start with the range. Our study of the range should include vegetation found, feeding value of native plants, and growing habits and hardiness of each common type. Much of our lands now under cultivation should be returned to native grasses. To repair the damage done by the plow is not a simple matter. It may require a generation or more for lands to go back to native grass.

Our lands under cultivation should probably be restricted entirely to feed crops. Only small grains produce feed grain profitably here. Alfalfa has a very definite place in the livestock-farming of the community.

Our greatest single feeding problem is that of providing reserves. Just as soon as the Great Plains farmer learns that his program must be based on *crop averages*, then and no sooner, will our semi-arid agriculture assume proportions of permanence. Feed reserves, particularly of roughages cannot be too strongly emphasized by the agriculture teacher.

Reserve ranges do much to offset feed shortages. Mr. Savis, who is in charge of the grazing experiments at the Government Experiment Station at Mandan, North Dakota, stated that their pasture grazed since 1914 at 78 percent of its normal capacity held out for the full 150 days in 1934. Since hearing this I sometimes wonder if there was an abnormal death rate among the bison in drouth cycles one hundred years ago.

Livestock selection and breeding I would rank as second in importance to feeding in this area. In a corn-hog dairy region there is probably no livestock problem quite as important as "farm sanitation." Here we are less crowded

Needed Adjustments and Direction in Vocational Agriculture

SHERMAN DICKINSON, Teacher-Trainer,
Columbia, Missouri

Note: Excerpts from an address presented before the Agricultural Section of the American Vocational Association, December, 1935, Chicago, Illinois.—The Editor.

S. D. Dickinson

I WISH first to mention some of our more noticeable shortcomings and then suggest "needed adjustments and direction" necessary if vocational agriculture is to have a successful future in service.

(1) My first criticism is a tendency to overlook our weaknesses. We have accomplished much since February, 1917, and we have a right to be very proud of it, but we have not accomplished nearly enough. Besides this, we have made many mistakes and are still making them. Yet even within our own family circle we have a noticeable tendency to gloss these over and to substitute for hard remedial efforts the old time-honored sedative of giving ourselves "a pat on the back."

(2) We are not reaching enough farm boys even in our so-called "all-day" classes. The last available data from Washington indicate that approximately 184,000 boys are enrolled for regular instruction in vocational agriculture classes in 5,165 high schools. Government figures show 1,036,000 boys in 11,742 rural high schools. We are reaching a large number, it's true, but in comparison with the total, woefully small. More will be said about the farm boy not in school later on.

(3) We have far too many poor teachers. The usual and heartening reply to this is that "this is true of all forms of education and to be expected, so what?" While I honestly do believe that we have the most capable group of teachers on the average, I still feel that they could be much better and *must* be if our program is to function satisfactorily. We still take what comes to us in our teacher-training institutions and do *not* do the best we can to prepare them for one of the most difficult teaching jobs extant. A viewpoint of the general inadequacy of teachers is well expressed by E. A. Cross in an article in the December, 1935, issue of the Atlantic Monthly.

(4) We have failed, to a very considerable extent, in the handling of the very delicate relationships which exists between the forces of vocational education and agricultural extension. Committed to the same ultimate purpose, the development of a permanent and prosperous agricultural and rural life, these two great agencies of society should have administration and personnel only the smoothest and most efficient relationship should exist. The very nature of the situation called for such co-operative attitude, and yet from the beginning of federal support to vocational education, over-lapping has lessened the efficiency of each enterprise and jealousy has reduced the effectiveness of the personnel. We are both doing better, but there is still too much rivalry where there should be complete accord.

(5) In our own realm of education we so conducted ourselves, and to a considerable extent still do, that the academic, professional, and other fields regarded us first indulgently and later belligerently. We were inclined to scorn advice and assistance and were at a loss to understand why many educational leaders actually opposed our program. We laid it to envy over our apparently fortunate position on the receiving end of federal subsidies, and let it go at that. Those in vocational education were the "chosen," those outside, unfortunately for them, were just in general education and there was really very little relationship between the two.

(6) We have neglected and are continuing to neglect the great army of farm youth out of school between the ages of 14 and 26. Even in communities maintaining vocational departments, attention is rarely given to these older boys who could undoubtedly profit thru systematic training in the occupation which is to become theirs for life. Our own statistics indicates the pitifully inadequate manner in which we are meeting this great need numerically, and to the casual observer it is plain that the quality of the little part-time work conducted is nothing about which to write home. We are now in the midst of a tremendous *putsch* in an effort to stimulate the part-time phase of our program, but to date there has been no great stampede to join the colors, and many of those most vociferous in urging an increase in this activity bring forward as the chief argument that "if we don't do it, some other organization will."

(7) Almost the same condition exists in the adult field. We saw the need earlier here and have made greater relative and actual progress than in either of our two other major responsibilities. I do not feel, however, that we have at all achieved what we should, certainly not in the refinement of procedures, and as a corollary, in results attained.

(8) The one unique phase of our vocational agriculture program has been supervised practice. This, unfortunately in the early days, was almost universally spoken and thought of as meaning a "project," and to this day we are paying the penalty. The vast majority of our students who carry on any home practice at all, still are numbered among the "one-project boys." We cannot but ly studied, superficially executed, and miserably accounted. Much splendid work is being done, but far too much is of less than mediocre calibre.

(9) Finally I wish to call attention to the narrowness of our aim—not so much in its expression as in our practice. I mean to say that we have followed the strictly vocational idea rather to the extreme in curricular and course content. We have been wholeheartedly training boys for making a living on the farm but doing practically nothing in preparing them for living a life in the country. In the occupation of farming, the two are inextricably entangled, and it would seem that vocational agriculture should recognize this fact and broaden its original conception accordingly.

BASED upon the statements which I have offered under the general heading of "what's wrong," I will attempt to set forth suggestions as to "needed adjustments and direction in vocational agriculture." I am hoping that thought and criticism may be stimulated to the extent that some intelligent action may follow.

Little need be said regarding our tendency to be overly optimistic as to our accomplishments. We must take on a sincere attitude of real self-criticism, acknowledging our faults and weaknesses at least to ourselves. Only then will we be in a position to really bring about improvement leading to our goal of maximum service. We may be sure that others are making such an analysis of our work, and much less intelligently and sympathetically than could we if we would.

The problem of increasing the proportion of farm boys in our high school classes has two major aspects. The simpler of these has to do with increasing the enrollment in courses already established. Probably in the majority of cases, our enrollment could be increased by 40 to 70 percent without the necessity of a material increase in teaching personnel or equipment. Better teaching and supervised practice, well planned publicity, and co-operation with school superintendents are major means whereby enrollments of all-day boys may be increased. Our work should be of such character that practically every farm boy will enroll just as naturally as and certainly more joyfully than he registers for a course in algebra.

The second aspect of this problem of reaching more farm boys is more difficult, but is just as necessary. We must have more departments of agriculture in our rural high schools. Every farm boy in this country should have an opportunity to take a good course in agriculture without undue inconvenience caused by distance between his home and the school. In Missouri, for example, of the approximately 500 first class rural high schools, only 146 offer the opportunity of a vocational agriculture course to their students. The secret of getting more vocational departments is a very simple one, just make people want them!

The problem of poor teachers is one which squarely faces the majority of the teacher-trainers. They are largely responsible when a poor teacher is accepted and trained, while the supervisors are responsible for permitting the poor teach-

did system of follow-up thru our in-service training and supervision. I would say that one of the major adjustments which we must make is in the intelligent selection of our trainees. The successful teaching of vocational agriculture requires a man of intelligence, personality, industry, and integrity. Many difficulties, of course, confront us in selecting and attracting trainees possessing these high qualities, but we must do more than we have toward the solution of this problem.

Our training programs must be materially improved if we are to give the most satisfactory preparation to the students in our classes. We still include too much filler, too much swivel-chair hooey, too much unprovable and disproven theory in our lectures and discussions. We do not as yet know just what to include in pre-employment training and what to leave for in-service training. We make a deplorable showing in our participation training. Yet we are doing little to study these vital problems! Here, as in practically every phase of our program, we must conduct practical researches to discover the answers. There is a possibility in a five-year training program, not necessarily as practiced by California or any form of the apprentice system, but a fifth year in the training institution, with this last year largely professional in character, and a considerable proportion of it devoted to participation training.

THERE still remains, as a major responsibility of the supervisor, the task of eliminating those men who, for one reason or another, prove to be unfit as teachers of vocational agriculture. Our program will stand or fall upon the work of the teacher in his school and community. Means must be found whereby the poor teachers may be promptly discovered and promptly—to put it kindly—turned into other fields of work where their incompetence will be less damaging.

As to the matter of the unsatisfactory relationship existing between the Smith-Hughes and Smith-Lever forces, I am convinced that unless we discontinue the "muddling along" process, sooner or later one or both of us will come to grief, and in the meantime the activities of each will continue much less effective than they should be. I'm very much inclined to fix the blame for this condition upon the "higher ups" rather than upon the rank and file. Ambition, jealousy, and personal rivalry rather than fundamental and real differences have been the causes of our difficulties. The one or two sporadic attempts which have been made to harmonize the two fields have resulted in "memoranda of agreements" which have been meaningless and served very little practical purpose.

What we need is a thoughtful and frank study of the situation by representatives of the two services, followed by an honest, unbiased, and intelligent arrangement whereby inefficient duplication may be eliminated and the work of the two properly co-ordinated. Unless this can be done, or unless radical changes are made at Washington, I am fearful of what may happen at no far distant date. Twenty years ago in Hennepin County, Minnesota, E. C. McGill Kirkpatrick and made our plans and thrashed out our difficulties. I'm inclined to think that this procedure should be even more formalized, and that these two groups should work more and more closely together toward the common objective. Responsibility should be divided, with vocational agriculture held primarily for the educative phase and extension for promotional, regulatory, and policy phases.

IN OUR relationship with general education we must change the attitude of non-integration, which we maintained during the first fifteen years of our life, to that of integration. Our field is only a portion of the great field of education. We are just as much a part of education as is mathematics, literature, history, or science. That we were comparatively new was no excuse for our attitude of aloofness; it was instead a good reason for fraternization. Our training program should include opportunities for a study of general educational problems, we should participate more in general meetings, we should more frequently seek the counsel of the general educator. All of us, including especially the high school teacher, must see our work as a part of the whole educational program.

Part-time and adult courses may be included in the same category when suggesting needed adjustments and direction. I have no hesitancy in predicting that, if we survive, the activities of continuing education will far overshadow those carried on thru the high school years. I mean that, both actually and relatively, more of our systematic training for the farming occupation will be provided for beyond the period of formal schooling. I believe, furthermore, that the arguments for such a shift in emphasis are perfectly valid. Every effort should be made, therefore, to study the technics of continuation instruction to out-of-school boys and adults, while students in training and teachers in service should receive thoro instruction in their use. Just at present the youth phase of education holds the center of the stage, and in the occupation of farming, it will always be a critical period. Vocational agriculture is in a strategic position to prepare these prospective farmers for greater success in that occupation. In my opinion, it is during this period that our training can be most effective.

OUR principal slogan, "Learning to do by doing," finds adequate support in both theory and practice. In its simplest form my recommendation is, "Put this slogan into universal and consistent practice." Teachers must be convinced of the educational value of the supervised practice idea, of its great possibilities, and of its actual necessity in training for a super-complex occupation such as farming. This means stronger training courses and practice work and continual post-employment stimulation. "Project" must cease to be synonymous with "supervised practice." A long-time supervised practice program must supplement annual planning and parallel the course of study. Some of our more far-seeing teachers are even now causing their boys to plan not alone for the four years of high school, but are systematically requiring that the boys shall picture their

While I believe that our primary aim should remain vocational, I am inclined to feel that we should interpret this term very broadly. Farming in this country, for the majority, will continue for many years to be a mode of living as well as a means of livelihood. It may be that the teacher of agriculture can include the living angle only incidentally in his teaching. It should be there, however, and whether incidental or not, such guidance should be planned rather than accidental.

FROM among the many other problems, I have selected seven and will offer my comments in the briefest space possible.

(1) It should become a common practice for every teacher to have in his possession an intelligently formulated long-time program for agriculture in his community, in terms of which his special plans should be worked out. Such a long-time program should be developed for any given type of farming region by the county agent, vocational teachers, leading farmers, and townsmen. Each vocational teacher should have an advisory committee of his own.

(2) Modification must be made in our traditional methods of course organization. The experimentation going on in various states at this time should be carefully watched and reported upon without bias or over-enthusiasm. Guiding principles should include greater individualization of instruction, attention to general values as well as specific, more definite guidance, and attention to psychological factors, and relationships in learning.

(3) Stronger programs of publicity must be developed. We are doing much which is worthy of note and it is to our interest to "tell the world."

(4) Our professional journal, *Agricultural Education*, should be far more adequately supported than is now the case. Such support should take the form of practically 100 percent subscriptions and of a much greater number of contributors. It should be possible for the editor to either increase the number of pages, improve the format and stock, or—and this does take nerve—politely refuse to print some of the material submitted to him for publication. This year for the first time, *Agricultural Education* is self-supporting financially, so that increased circulation-income can be used for improvement.

(5) The growth and development of the F.F.A. should certainly be encouraged, but only under the most watchful and judicious guidance. It must be kept free of the taint of political or other similar propaganda, it must remain a boys' organization to the fullest extent possible, and above all it must develop a more obviously worthwhile program. Inasmuch as programs grow out of objectives it seems to me that the F.F.A. objective, particularly in its differentiation from that of vocational agriculture, is in need of clarification. From my point of view, the Future Farmers of America has one major goal above all others, and that is "training for rural leadership." If this is true, then some of our emphases of the

beyond our most enthusiastic dreams, but wrongly directed it will either languish into obscurity or turn to undesirable purposes.

(6) Finally I wish to comment on our function in agricultural adjustment and rehabilitation, so prominent under the stimulation of the New Deal. I wish to propose just one principle which I believe should guide us in our relationship to this adjustment program. Our job is one of education—not promotion; of teaching—not preaching. I see no reason why we should commit ourselves, individually or collectively, to any line of action proposed by any governmental agency. Officially our work is to assist our students and farmers to think thru and understand the meanings and possible outcomes of the various measures proposed.

Adapting Vocational Agriculture to the Community

(Continued from page 53)

and dairy cattle. Neither is it important that buildings be permanent.

Western soil problems differ materially from those of regions where intensive cultivation is practiced. Here we are primarily interested in rainfall and water conservation. Thru rainfall records we should be able to show our boys that only one year in four can produce a good crop and that half of our grain crops will be practically failures. I have found that such a study does not dampen the enthusiasm of the boys in the least. It does, almost without exception, make them livestock-minded. It also develops attitudes that will influence very definitely the thinking of the community.

In cultivated crop regions soil fertility is a major problem. We need spend little time on this subject. Fresh manures and crop residues may even be distinctly harmful in dry soils. These, if used, are most practically applied on permanent pastures or hay lands. We are interested in soil tillage mainly from a standpoint of the reception of soil to water and the retaining of this water. We are interested mainly in cultivation as a means of weed destruction. Compared to these two factors—soil water and wind erosion—other soil problems are of minor importance in the Great Plains.

Our shopwork offers problems peculiar to the community. Our supervised practice program not only involves a different approach than that of the departments in the eastern part of this state but demands a different procedure of supervision. Many of our boys live 100 miles from school. My experience in evening school convinces me that even adult education problems are different. It all resolves itself into this—*that the agriculture man cannot for one minute allow himself to stand still. Stale outlines and stale lesson plans are a distinct handicap even when one stays in the same department several years.*

Receives Scholarship

South Dakota—The Future Farmers of South Dakota voted a scholarship to

Co-ordinating the Work of the High Schools and the Colleges*

J. A. LINKE, Chief, Agricultural Education Service, United States Office of Education, Washington, D. C.

I WISH to discuss this subject by a consideration of two questions—first, how can the agricultural college adjust its courses to best meet the needs of students who have had vocational agriculture in the high school, and second, what can the agricultural college do to better prepare teachers of vocational agriculture.

In discussing the first question, I can see the college facing certain difficulties in adjusting its courses to meet the needs of two groups—first, those coming from vocational departments, and, second, those coming from non-vocational departments in the high school. I have just recently written to several colleges in typical states, and in the replies I find that about 50 percent of the students in the freshman classes have had vocational agriculture in the high school. Can separate classes be organized for this group? By placing the non-vocational group in the regularly organized college courses and arranging more advanced courses for those who have had vocational agriculture, it would solve some of the problems based on the needs of the two groups. The agricultural courses given the student during his four years in high school are, at least in most cases, equivalent to those given in the first year in college. He should therefore be given college credit for his high school agriculture, or the college course should be so adjusted as to avoid too much duplication of high school work.

Again, the high school courses in vocational agriculture have been organized on a practical basis, i.e., the boys are to apply the instruction on the home farms under supervision of the teacher. In other words, in his farmer training program, the boy is started on the job of farming, and the class instruction is used to help him solve his problems and therefore improve his farming ability. When the boy enters college, where class instruction often deals more with theory than practice, he is naturally somewhat disappointed in his college work. The college courses could be greatly vitalized if the facilities of well-equipped colleges and other farms could be tied up in a practical way to the courses of instruction. When I was a student in the agricultural college, I benefited most, I think, from a course in animal husbandry because the livestock on the college farm was used in close connection with the classroom instruction.

There are three advantages derived by the agricultural college from the fact that we have vocational agriculture in the high schools. First, it gives added opportunity for the placement of agricultural college graduates. Before the depression, a study showed that over 40 percent of these graduates were being placed in teaching positions. Second, agricultural teachers direct vocational and high school students into the agricultural college. It is the first time that the agricultural college has had its graduates placed in the high school to advise with and direct high school students to the agricultural college. A report from one of the states shows that high schools with vocational departments are sending three to one students to the agricultural college as compared to high schools with no vocational departments. Third, it enables the agricultural college to extend and render a greater and more intensive service to farm people thru the work of vocational teachers. During the fiscal year of 1934-35, 5,326 teachers in 5,251 schools in the United States and its possessions gave systematic instruction to 190,000 farm boys in the high school, to 23,000 out-of-school youth in part-time classes, and 99,000 adult farmers in evening classes, or a total of 312,000 farm people.

There has been a steady demand for and growth in departments of vocational agriculture since the beginning of the vocational program, and under favorable conditions the time is not far distant when vocational agriculture will be taught in every rural high school in America. By the proper preparation of teachers this should enable the college of agriculture to reach a great majority of farm folk and thereby develop with them a more remunerative, wholesome, and satisfying country life.

There are, on the other hand, important advantages which vocational agriculture has rendered to secondary education. The fact that vocational agriculture was established in the high schools is leading the way to a reorganization of the whole secondary educational program and placing it on a practical foundation to meet the life needs of those who attend. I have no alibi for the high schools. They have had in the past the primary objective to prepare for college, while the new objective coming into existence is that the high school should be preparing for life and life's responsibilities. If this should become the objective in all high schools I wonder what would be included in their courses of study. If I read it right, the trend in education today is toward bringing into our educational system the school of experience closely tied up to theory. In other words, the test for any course in the high school should be based upon what use the student can make of it in actual life situations. Then, instead of being a foreign institution in the community, the high school would begin to function to meet the needs of every individual, both youth and adults, because the high school should be an institution toward which every individual in the community is looking for help in an educational way.

In order that the agricultural college may become more effective in extending the program of agricultural education in rural communities, it must look to the proper preparation of teachers of vocational agriculture to meet the requirements of the job based on the needs of the farm people. The agricultural teacher is as much a child of the college as any

the colleges are not doing a fairly good job in the preparation of teachers of agriculture, but I am saying that great improvement can be had if we will make a study of job requirements and adjust the courses of instruction to more nearly meet the teachers' needs.

Suggested Set-Up for Teacher Training

A suggested set-up for the training of teachers of agriculture may be made from what is found in some of the different colleges. There are two main features to consider: first, the professional training, and, second, the technical training, both of which are very important.

Professional Training

The professional training consists in most part of an analysis of the teacher's job, followed by a study and discussion of how best to perform these jobs. Many people think that the job of the agricultural teacher consists of how to conduct classroom instruction, but his work is not limited to the classroom; it extends to the uttermost limits of his community and consists of such things as surveys, the setting up of objectives and building programs of work, supervised farm practice on the home farms, co-operative farming activities, the organization and conducting of part-time and evening classes with out-of-school youth and adult farmers, farm shopwork, the organization of Future Farmers of America chapters, etc.

IN CONNECTION with resident teacher training, practice teaching centers should be established in high schools near the college with an outstanding teacher in charge who will organize as many activities of the teacher as possible in order that the trainees can study and participate in these activities in the training program. Then, after the teacher gets on his own job in some local community, it is important to have someone assist him in getting his work properly organized and in putting into operation the activities for which he has been trained. A good plan is found in a few institutions where they have two men employed as teacher trainers. During one year one of these men gives the special methods course to the group of trainees and the next year does the follow-up work with them in the field while the other man is conducting the training courses in the institution. This alternating plan seems to be getting good results.

Technical Training

Since more than 40 percent of the agricultural college graduates go into teaching, it would seem that the wise thing for the colleges to do would be to set up courses especially organized for the training of agricultural teachers. It would be a good plan to have these courses set up on the farm enterprise basis, making a job analysis of each enterprise. The class work could then be carried on by a discussion of the problems in connection with each of the jobs, letting the student get his information from any source he sees fit.

In addition to the reorganization of

trainee will get practical experience in so far as possible on the jobs of the various enterprises, because he will be expected to perform these job activities in his work as a teacher of vocational agriculture. It is therefore advisable to tie up all of the facilities of the college and the college farm in order to give the prospective teacher all possible experience on the jobs which he will be expected to use in training vocational students for farming.

The agricultural college should see to it that each trainee should be able to perform many of the farm skills necessary to the success of the teacher of agriculture. These skills should be listed in each enterprise and checked up with the trainee to see that he is able to perform them. Many teachers are greatly embarrassed by not being able to perform some of the necessary farm skills when they go up against practical farm situations in local communities.

In one of the colleges the teacher trainer co-operated with the teacher of horticulture, and as a result trainees were given practice in propagation, transplanting, care, cultivation, pruning, etc. In another college a course in farm shop was organized in keeping with the jobs that the trainee would be called upon to perform in teaching a course in farm shop to vocational students. The college instructor not only taught the students how to teach each job but he also gave them training in performing the job. This is one of the best training courses for the teaching of farm shop in the country.

One of the most important things and one now being given considerable attention in the agricultural colleges is the improvement of college teaching. The unseen influence of college teaching on the methods used by vocational agriculture teachers is greater than one would suspect. We are all apt to use the same methods in our teaching as were used on us in college, whether good or bad. The college of agriculture is an educational institution, and, therefore, methods of instruction should receive as much attention as technical information. The student learns more thru participation than by being lectured or questioned in class recitation. The conference or discussion method accompanied by practical application should be used whenever possible. The college instructor should set up real problems for consideration by the class and then arouse discussion, securing participation by all members of the class. When certain conclusions are reached, then the next step is to test out these conclusions thru practical application. It is thru putting things to the test that the truth is found. We learn more by actually doing things than we do by hearing about them.

After the teacher gets established on his own job in some local community, there should be a follow-up by the college in up-to-date technical subject matter. This is being done in many of the states by having subject-matter specialists work with teachers in summer schools and conferences. We also feel that there should be in the college of agriculture someone employed who is thoroly equipped to prepare subject matter material especially adapted for the use of agricultural teachers. This material

If the colleges would employ such a person, they could certainly render a larger service to the teachers of vocational agriculture and therefore to the farm people of the country.

The Agricultural Program and Public Relations

L. KEITH CHENEY, Instructor, Grand Marais, Michigan

THE best home and community contact which the agricultural instructor can have is the wide-awake boy who has accepted the challenge of a better living on the farm.

This condition, accepted as one of the long-time aims, involves the use of numerous devices for the accomplishment of this purpose. Without any doubt supervised farming is the true foundation of the structure. Strong foundations can support beautiful, desirable, and enduring superstructures, while poor foundations are soon discovered.

During the past few years, the F. F. A. boys with whom I have worked have striven to perfect this foundation. The methods used have varied with the types of students and their interests.

A large class of farm boys with 12 projects was my first challenge! From this starting point to an annual program of approximately 40 projects was an achievement which took four years to accomplish.

Necessarily a wide range of methods and devices was necessary to reach this goal. Among the desirable methods successfully used were: the requiring of a project from every student who enrolled in a class of vocational agriculture, and the signing of a statement in which it was agreed that no credit in the class work would be earned until the completion of the project. As a reward for initiative, scale of enterprise, and results, the best projects were awarded the mark of "A" or "B." This procedure produced 25 project students the first year with an income exceeding twice the former year's results. The year following this program, the idea of project work having been instilled in the minds of prospective students, the agreement was dropped. In its place was substituted the granting of credit for each summer's project program, provided the program was approved by the instructor and satisfactory reports were completed. This practice of granting credit conformed to the practices of other agricultural departments of the state.

Quality seemed to be the factor that it was now necessary to instill into the project program. The device of exhibiting at fairs, and the selection and sending of judging teams composed of project boys to compete with neighboring schools, seemed very effective.

By-products of the fair work were: pronounced desires on the part of boys to own purebred stock, and improved feeding and exhibiting of animals and products. This worked out satisfactorily and did obtain higher quality in the crop and animal enterprises.

In our locality it seemed desirable to start a school fair, but a much larger view of the situation prevailed and it

Methods

Combining Class Work and Supervised Practice Grades for Vocational Agricultural Students

J. W. BRIMM, District Supervisor, Jackson, Tennessee

HOW do you grade boys taking vocational agriculture? That question has been a puzzle to me since the first set of grades I was asked to turn in to the office of the school principal for the boys' permanent records. So much did it trouble me that I at once set myself thinking as to what would be a fair and just way of grading.

We constantly talk of a supervised farm practice program, insist and even require it of a boy before giving credit for his year's work. Yet, we do nothing to recognize or reward him in the way of grades for this additional work. After all, what is our ultimate aim in teaching a vocation? What do grades made in school mean to the business world? We must face the fact, that, if the subject matter taught in school is not practical and will not help to make this boy a better farmer than his forefathers, then we need to change our thinking and teaching. How are we as teachers of agriculture to know just how skillful the boy has become in the jobs we have been teaching unless we see him at work, or the results of his work? This being the situation we should feel justified in evaluating supervised farm practice along with class work.

A definite system of calculating grades when understood by all boys will tend to stimulate an enlarged supervised farm practice program. We must not overlook the fact that the grade given in this must be combined with the notebook grades, classwork or daily grades, and term examinations for a final grade. It has been my desire to make a system flexible enough for the boy who is poor in school work, yet is a good worker and has an excellent supervised practice program under way, to make a good school grade.

This is the fourth year that I have tried systems of my own. Each year I revise the card and try to correct the mistakes found by actual use. I have found this one the most satisfactory to date. It no doubt has many mistakes and will have to be adjusted to local situations.

Realizing that a first-year boy will likely not have the opportunity for as large a practice program, it is perhaps best that he GROWS into the farming business rather than GOES into it, which may result in discouragement before he gets advanced training. I give all the grade for the first half of the year to classwork activities. By spring he should have his program selected and under way. This being the situation 25 percent of his second semester grade will be allowed on his program actually under way.

to take agriculture beyond his freshman year he must have a good farming program. At the same time there are many small town boys who have poor facilities for practice work, yet are anxious to have and really need some knowledge of agriculture. This card will enable them to make a reasonable grade the first year. After that, if he continues interested, he should be willing to rent acreage sufficient for a more extensive program the next three years.

J. W. Brimm

The bonus points will reward the wide-awake, energetic boy by giving him additional points for his grade for a more up-to-date program. When a boy's supervised practice program is such that a freshman totals more than 25 points or a sophomore, junior, or senior totals more than 40 points it may be handled as follows: for each 10 points or fraction thereof over the maximum of 25 or 40, one additional percent shall be added to the grade. For example, suppose a junior has a total of 57 points. This gives him the difference between 57 and 40 or 17 extra points, thus giving him 2 percent to be added to his grade for a total of 42 percent on supervised farm practice. It is *possible* but not *likely* that a boy's grade may total more than 100 percent. Such exceptions may be handled as the teacher thinks best.

Let us take the total grades of a junior. At mid-term he has completed the following farm practice program: one registered sow and litter; five acres corn (certified seed used); one-half acre tobacco. He sows his tobacco land to crimson clover and corn land to rye as soil improvement crops. His points according to the score card are as follows: one sow and litter, 20, sow registered, three; three acres corn, 20; two additional acres corn, 10; certified seed corn used, three; one-fourth acre tobacco, 10; one-fourth acre additional tobacco, 10; major enterprise sow and litter, five; contributory enterprise corn, three; soil improvement crop sown on corn and tobacco ground, three; one additional enterprise (tobacco), three; exhibits tobacco at fair, three; total number points, 93. Subtracting 40 as maximum from total of 93, leaves 53 extra points (1 percent on grade for each 10 points or fraction) which will net him 6 percent more on his grade for a total of 46 percent; project record book complete 5 percent; mid-term examination 15 percent (possible 20 percent); classwork or daily grade 15 percent (possible 20 percent); notebook 14 percent (possible 15 percent). This gives him a total grade of 95 percent.

Such changes as may be best to fit local situations may be made by the teacher.

AGRICULTURE STUDENT GRADE CARD, TENNESSEE

Year	Notebook	Class	Exams	Farm Practice	
				Work	Book
Freshmen (1st Sem.) (2nd Sem.)	25% 25%	25% 25%	50% 25%	25%	
Soph., Jrs., and Seniors	15%	20%	20%	40%	5%

Scaled drawing with dimensions of crop acreage must be in notebook.
Completed projects count in grades of first semester (January).
Projects actually in progress count in grades of second semester (May).

SCALE OF POINTS FOR EACH PROJECT

Enterprise	Points for first unit	Points for additional units
Sow and Litter	20 for one sow	10 for each additional sow
Feeder hogs	5 for one hog	3 for each additional hog
Dairy (milk)	15 for one cow	5 for each additional cow
Dairy (calves)	10 for one calf	5 for each additional calf
Beef		
(breeders)	10 for one cow	5 for each additional cow
(market)	12 for one calf	8 for each additional calf
Sheep	10 for five sheep	2 for each additional sheep
Poultry		
(layers)	20 for fifty hens	2 for each additional 5 hens
(baby chicks)	15 for 100 chicks	1 for each additional 10 chicks
Bees	5 for first colony	5 for each additional colony
Corn	20 for first 3 acres	5 for each additional acre
Cotton	20 for first 3 acres	5 for each additional acre
Tobacco	10 for first ¼ acre	10 for each additional ¼ acre
Irish Potatoes	20 for first ½ acre	10 for each additional ¼ acre
Sweet Potatoes	20 for first ½ acre	10 for each additional ½ acre
Melons	20 for first 1 acre	10 for each additional acre
Tomatoes	10 for first ¼ acre	5 for each additional ¼ acre
Beans (green)	10 for first ½ acre	10 for each additional ½ acre
Berries	10 for first ¼ acre	5 for each additional ¼ acre
Peanuts	10 for first ¼ acre	5 for each additional ¼ acre
Orchard	10 for first ¼ acre or 10 trees	1 for each additional tree
Garden	10 for first ¼ acre	5 for each additional ¼ acre

*Bonus points:	
Major enterprise (example: brood sow of feeding hogs)	5 points
Contributory enterprise (example: 3 acres corn)	3 points
Soil improvement or green manure crop on land	3 points
Additional enterprises (up to first unit requirement)	3 points each
*Must be carrying more than one project to claim these credits	
Exhibits from project at fair	2 points each project
(these points count on the first semester grade)	

Editor's Note: Mr. J. W. Brimm for eight years was the teacher of vocational agriculture in the Farragut High School at Concord, Tennessee. He was critic teacher for the trainees who came to the high school for their work.

Teaching Farm Management

R. W. SCHAAD, Instructor,
Myrtle Point, Oregon

IN CONTACTING boys and farmers thruout the community in regard to agricultural improvements, teachers are greatly impressed with the necessity of improved management on most farms. My own experiences leave me inclined to believe that approximately 90 percent of the farmer's problems and failures are caused by lack of managerial ability. Farm management, as I see it, is the foundation of a farmer's success. "Farm management is that subject which deals with the most efficient use of land, labor, and capital on the individual farm." My definition of farm management is still wider in scope and includes, in addition, the proper selection of the farm, livestock, crops, machinery, and equipment, and also the efficient marketing of the products from that farm.

My purpose is to make the farm management study more practical so that it is well understood by all members of the class. The boys will soon carry the ideas to the home farm and also incorporate them in their project work.

I. During the summer arrangements are made with several key farmers to use their farms for a farm management study during the school year. These farms should not be more than four or five miles from school for best results. The farmer must understand the program, because his information is needed and then any criticism of the problem will not cause a misunderstanding.

II. Early in the fall the farm management class makes a field trip to these farms for the purpose of rating, using a score card. Each boy acts the part of a buyer. The farms are studied from all angles as indicated on the score card. The farm receiving the highest rating by the class is the one selected for the

III. After the farm was selected the class made a trip to the county court house for the purpose of getting information in regard to the taxes, deed, or any legal transactions or history of the farm. This alone is a worth-while trip because it shows the boys other connections to the farming business than just straight farming. The county assessor will be a great help. He will also have a blueprint map of that farm. (Before the courthouse is visited to get this information, the farmer must give his o.k.)

IV. In making the map of the farm there is a wonderful opportunity for giving the boys some work in leveling for topography, drainage, fence lines, and so forth; soil study in making borings for soil type, soil acidity tests, water table tests; map drawing for topography, drainage systems, roads, fields—all are practical farm problems. The farmer will be glad to give the boys the inventory, sales, or receipts, and purchase items or any such information. It is a good plan to do this on a rainy day, when the farmer is not too busy.

V. Outline of report on the original farm.
- A. Description of original plan of farm
  1. Prepare a map showing legal boundaries of land (as obtained by metes and bounds in abstract of title), location and character of all fences, lanes, gates, fields, streams, springs, ditches and uncleared land, waste land, wet land, pasture land, crop land, chief soil type areas, approximate topography in rough contour lines, acres of all areas, and so forth. The caption of this map should give the name and address of the owner of the farm, the number of acres, legal description, direction and distance to the nearest town and to the nearest shipping station, the scale of the drawing in feet per inch and by graph, points of the compass, the name of the student preparing the map, and the date.
  2. Write a brief description of the farm as it is now, giving total area in crops, pasture, uncleared land, wet land, waste land; character, depth, and condition of the soil; technical names of the soil (with map of the same); brief history of crop yields and lands for several years past; cropping systems or rotation practices (if any); condition as to drainage and weeds; character and value of uncleared land; kind and condition of fencing; roads and distance to shipping point, and so forth.
- B. Statement of present management and business of the farm
  1. Fill out a farm management survey form for the past year's business covering detailed inventory of all farm property, land, buildings, livestock, and machinery, summary of the year's business.
  2. Make a brief tabulated statement showing the present production program, source of income, feed produced, manure and straw produced, fertility income and outgo, man and horse labor program, and duty of machinery, with notes as to tillage, manuring, cropping, and feeding methods now used.
- C. Description of the original farmstead
  1. Prepare a plan of the farmstead showing accuratcly the location and dimensions of all buildings, lanes, fences, gates, garden, orchard, dooryard, well, and trees.
  2. Draw floor plans of any permanent buildings.
  3. Write a brief statement as to the character, capacity, and condition of buildings, yards, and orchards, and give accurately the usual route of travel on the farmstead morning, noon, and night in doing the usual chores, or getting water, opening gates, getting ready to go to the field. Map this chore route and tabulate the distance in miles per year.

VI. Outline of report on the reorganized farm.

The reorganization plan of the farm includes the following: a map showing a complete revision of the above factors; a description giving the weakness of the old plan and the advantages of the new plan; new field layout, showing size of fields, lanes provided (width and length), fences (rods, valuation, and kinds), drainage required and its cost for installation; clearing required and its costs; a complete new farmstead arrangement showing gains achieved, costs, and conclusions; and finally a report of the new business organization showing all possible enterprises—soil improvement program, the new cropping system, new livestock program, new marketing program which includes every phase of marketing for the community in which the farm is located, and the financial set-up which includes the amount of capital involved and returns expected.

FARM SCORE CARD

(Revised From the Oregon State College Farm Management Department Farm Score Card)

	Norm	1	2
Score from the standpoint of what is normal for the region			
ACRES			
PRODUCTIVITY			
1. Cultivated____. Other Tillable____. Non-tillable____	30		
TOPOGRAPH (Tillable lowland____acres. Tillable upland____)			
2. As affecting production (fertility, exposure, adaptability)	20		
3. As affecting cost of operation	20		
4. As affecting air drainage—where important	10		
5. As affecting erosion of soil	10		
FERTILITY			
6. Natural fertility (types and depth of soil, etc.)	80		
7. Present fertility (crop history, yields, acidity, etc.)	40		
PHYSICAL CHARACTER OF SOILS			
8. As affecting cultivation and growing season	50		
9. As affecting diversity of production	20		
10. As affecting moisture retention, leaching, etc.	10		
DRAINAGE			
11. Natural and artificial, overflow, etc.	50		
CONDITION OF LAND			
12. As to weeds, stumps, stones, hardpan,			

Farmer Classes

Building a Sound Dairy Program

ROY A. NELSON, Teacher,
Virginia, Minnesota

IN ORDER that the reader may get a complete picture of what is being done in St. Louis county on dairy development, it is necessary to give the location, description, and some pointers on past history of the county.

St. Louis county, which is located in northeastern Minnesota, is in the region designated as the Arrowhead Country. It extends from the Canadian border on the north to Lake Superior on the south.

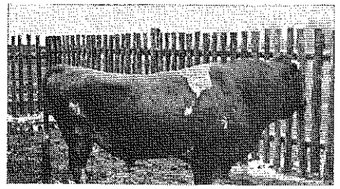
During the past fifty years a rapid growth and change have taken place agriculturally in St. Louis county. Going back forty to fifty years ago we find the county had a beautiful stand of virgin forests with logging operations under way in numerous parts of the county. In a period of approximately twenty-five years the majority of the forest was cut down, and people coming into this country from the Scandinavian countries and Finland had a desire to settle in this section of the United States as the climate and geographical conditions were similar to that of their homeland. These people bought forty or eighty acres of land and constructed a small log house and barn and cleared away the brush and stumps in order that crops could be put in whereby a few cows and chickens could be kept on the farm. The first few years the pioneers found tough going so they had to look for work in the lumber camps and on the construction of roads in order to make enough money to buy food and clothing for their families. This they continued to do until at present we find logging and road building are something of the past and they must turn solely to their farm for a living. In the past, these settlers have been very busy getting their land under cultivation and have not had the time to devote to a study of improving their dairy herds. It was not until about 1930 that the farmers in this county felt a desire and need of co-operating and making a study of their problems.

In 1930 when Mr. Arthur Lampe became superintendent of St. Louis county schools he was in sympathy with the farmers' condition and could see a need for the county schools working with them on a study of their problems. Mr. Lampe's point of view was that it is just as important to educate the farmers thru the rural school centers as it is to educate their children. In order that the farmers could get the education and assistance to improve their conditions, ten Smith-Hughes Agricultural Departments have been set up in ten different communities in St. Louis county. These agriculture departments are under the supervision of eight college of agriculture graduates who work with the children in the schools and the farmers in the community. Since these departments have been set up, considerable interest has been shown in agworking out of the county schools office devote all of their time to conducting evening schools with the adults. The agricultural program of St. Louis county is under the supervision of Mr. Leo L. Knuti.

The work that has been done by the agriculture instructors in St. Louis county has been remarkable. They have worked with the farmers in building a well-rounded agricultural program. The majority of the time has been devoted to dairy improvement, so the remainder of this article will be taken up in showing what improvement has taken place.

Each of the agriculture instructors has been conducting evening schools with the farmers in his community. The farmers are allowed to choose the topic which they think should be discussed, and dairying being of main importance has been selected by the majority of the groups.

The first dairy evening school to be conducted in St. Louis county was under the supervision of Mr. Felix A. Nylund in the Cherry community. The farmers in this community came togeth-



One of Purebred Sires

er to discuss their problems during the fall of 1931 and winter of 1932. Thru this series of dairy meetings the farmers had an opportunity to discuss their breeding, feeding, and management problems, and get advice from the teacher of agriculture and others in the group. After a complete discussion of dairy problems the group considered the advisability of setting up a purebred sire association so that they would all have an opportunity to use a well-bred registered sire at a reasonable fee. Special meetings were called for all farmers in the Cherry community. Trips were arranged so they would all have an opportunity to see what good breeding had done for other farmers. These meetings led to the formal setting up of the Cherry Purebred Sire Association which is made up of two blocks with a total membership of nineteen farmers. Four registered sires have replaced nine scrub sires formerly kept and are breeding 153 cows each year.

During the fall and winter of 1932-33 dairy meetings were conducted in the Clover Valley community under the supervision of the writer (then teacher of agriculture at the Clover Valley High School). After a complete discussion of breeding, special meetings were called for the purpose of setting up an association. These meetings were held, at which time the Clover Valley Purebred Sire Association was set up. Forty-two farmers signed up to become members of the association. A check-up was made on the number of cows to be bred and it was found necessary to secure three sires. These sires were purchased from good breeders in Carlton county during February, 1933. The interest of this association has grown so that on April 5, 1935, another bull was purchased to take care of the added members. At present there are sixty-two members in the association owning 287 cows. Six registered sires have replaced eighteen scrub sires.

It is not necessary to describe in detail other meetings of a similar nature held by the following teachers of agriculture in one or more communities in the county: Mr. Henry Roningen, Cotton; Mr. Harry Paterson, Clover Valley; Mr. Nelvin Haugland, Cherry; Mr. Paul Lindholm, Fork Valley; Mr. Leo Fenske, Alango; and Mr. Ralph Backstrom, Aurora. Each of the teachers mentioned has contributed to the success of the program as indicated in the summary table.

The value of the improved breeding and feeding had been so pronounced in the county that Mr. Arthur Lampe, superintendent of St. Louis county schools, and Mr. Leo L. Knuti, agricultural supervisor, felt it advisable to place the writer in charge of the dairy work.

Name of Association	No. of Blocks	No. of Bulls	No. of Members	No. of Cows	Replaced Bulls	Date Organized
Willow Valley	1	1	14	50	2	Oct. 17, 1926
Little Fork Valley	3	3	25	100	5	Feb. 10, 1936
Wolf	1	1	8	30	3	Nov. 21, 1935
South Meadowland	1	1	10	50	4	Mar. 28, 1936
Cherry	2	4	19	153	9	1932
Iron	1	1	7	58	3	1935
Cotton-Kelsey	2	2	10	100	3	Mar., 1935
Central Lakes	1	1	8	25	4	1934
Alango	1	1	11	63	6	Mar. 30, 1936
Palo	1	1	14	87	7	Mar., 1933
East Palo	1	1	16	86	8	Aug., 1933
Lakewood	1	1	17	63	6	Oct. 15, 1933
Clover Valley	4	6	62	287	18	Feb., 1933
Aurora	1	1	10	50	3	1935

During the fall of 1935 dairy meetings were conducted by the writer in the Zim, Sax, and Wolf communities. Out of these meetings an association has been set up in the Wolf community with eight members owning one registered sire. These men will have thirty cows to breed by this sire during the coming year. They are now keeping the one registered sire in place of the three scrub sires formerly kept. In the Sax and Zim communities the farmers are considering the organization of an association; as soon as the proper number are drawn together, an association will be set up.

At present we are working with eight groups which should lead to the formation of bull associations. Plans are to make every dairy farmer in the county realize the value of an improved and organized breeding program. This can be accomplished only thru the instruction as offered by the Smith-Hughes Agriculture Departments.

A complete picture of what advancement has taken place in improved breeding is presented in the accompanying table.

This table brings out some interesting facts. It is shown that fifty-five less bulls are being kept at present by association members. If the average cost of keeping a bull is $50 a year, it shows an annual saving of $2,750. The average production of cows within this county is very low. Thru the use of these registered sires, where the average increase in production is fifty pounds butterfat per cow, this would amount to 65,600 pounds butterfat increase yearly when the farmers have replaced their cows with heifers from the association bulls. Figuring that at an average price of 30c per pound for butterfat it will be an increased income to the members of $19,680 yearly.

All of the registered sires which have been placed into the associations have been of the Guernsey breed, so we are building a dairy program around one breed. These sires have all come from herds free from disease, and each individual has exceptionally good backing, their dams and granddams averaging over 500 pounds butterfat a year.

The next step that is to be taken by the Departments of Agriculture in St. Louis county schools is to continue the setting up of new associations. Plans are underway for setting up six or seven new associations this coming year with ten or twelve registered Guernsey sires used by approximately one hundred members. Plans are also underway for the setting up of a cow-testing association which will be available for every member of a purebred sire association. When this is accomplished we will get a report on the production of every cow in the bull associations and have an opportunity to prove and index every registered sire that we have. By this method we can continue to use the best sires and dispose of the poor ones.

I have covered the program on breeding as it is carried on in St. Louis county at present. A program just as efficient is being carried on for the feeding and management of these same herds.

I believe that the agricultural program as it is carried on in St. Louis county under the direction of the teachers of agriculture working so efficiently: (1) a co-operative and hard-working group of farmers, (2) eleven agriculture teachers that are interested in putting over the best program of work, (3) the proper supervision of these departments by Mr. Leo L. Knuti, agriculture supervisor, (4) the wholehearted support of the program by Mr. Arthur Lampe, superintendent of St. Louis county schools and the other members of the board of education.

In closing I wish to quote a few remarks made by farmers showing their appreciation for this work:

(1) "We should have had these dairy schools ten years ago so that we could have had good herds today."

(2) "These dairy trips are sure enjoyable and educational."

(3) "With the help of the teachers of agriculture we will have an opportunity to have the best dairy stock in the United States."

(4) "These bull associations are a wonderful thing for the dairy farmer."

(5) "I didn't think we could work together and form a purebred sire association."

OUR COVER

Results of Evening School Program

EARL G. LANDERS, Instructor,
Dardanelle, Arkansas

DIVERSIFICATION as well as other practical farm improvement practices has been brought to Dardanelle community almost entirely thru evening school work. As a result of this instruction and its follow-up work, this community has successfully put across the five-point program that Arkansas has been encouraging, consisting of cash enterprises, ample feed for livestock, ample food supply for all families, soil improvement enterprises, and recreation.

In Dardanelle school area there are 12 district communities. Farmers of these communities are assembled in four centers for evening school work. These farmers form an organization in each of their respective centers, which might well be called a farm improvement club. The meetings are held in the evening once each week for at least ten weeks, usually starting in October.

The primary purpose of these meetings is to discuss the practical problems of the farmer. The same unit course is not necessarily taught or discussed in all four evening schools, but they are usually similar. Insofar as it is possible, the farmers of a community decide what problem needs their attention.

To illustrate the method used in developing the Dardanelle evening school program, one of last year's centers will be used as an example.

At the beginning of the year's work Dardanelle farmers faced two serious problems, namely a great need for conserving our soil and an increase in cash income, caused by the recent years of drouth and flood. During the past few years poultry and dairying had been stressed. As a result of an intensive drive led by evening school forces, Blue Valley Creamery located a large butter plant at butter annually, furnishing a good market for butterfat. Attention given to the development of poultry had been along the line of egg production. A nice income has been coming each year from an Irish potato crop, which was also a result of evening school instruction.

With these facts in mind it was agreed at the first meeting that the course for the year should be threefold, namely soil improvement and conservation; broiler production; and improvement of the laying flock.

The first three meetings were centered on broiler production. The first meeting consisted of a report by the leader as to the broiler outlook with a comparison of prices of poultry for the different years. With prices of pork and beef at a high level and the present price of poultry being rather high, indications were for an increased demand for broilers. Discussion number two consisted of an explanation of the time and methods of incubation and brooding. A discussion was carried on by those present as to plans for the enterprise and whether it was practical. The third was a joint meeting of farmers and farmers' wives at which the county home demonstration agent assisted with the discussion and plans. At the four schools, 7,500 broilers were pledged to be produced for the first year to be marketed co-operatively. This was preceded by a blackboard illustration as to the approximate cost and probable income.

A 150-mile tour was made to Conway soil conservation demonstration area.

Approximately 400 farmers and businessmen from Yell County made this trip, 150 of whom were men regularly enrolled in evening school work in Dardanelle. These farmers visited the area with the view of observing the work done by the government in an attempt to help the farmer with this grave problem of overcoming soil erosion. As a result of this tour a great interest in conserving soil was developed. Thus the next three meetings were devoted to the soil conservation problem. Discussions for these meetings were: terracing; fall pastures and green manures; and lespedeza as a pasture and as a soil builder. A monthly county meeting of the Smith-Hughes teacher and two representatives from each evening school center was held, at which the soil conservation problem was attacked on a countywide basis.

The next meeting of the organization varied from the regular theme in that two resettlement projects were worked out thru which two purebred bulls were obtained.

Meeting number eight was a discussion of the improvement of the laying flock in which housing, diseases, and feeding problems were treated.

The last four meetings were devoted to an explanation of the new soil conservation program. In these meetings the cotton situation was first discussed, then "How Much Cotton We Should

Future Farmers of America

Breaking the Ice

E. J. DANIELS, Adviser, Brookings, South Dakota

MUCH has been written and said concerning father and son banquets. Each F. F. A. chapter has made strenuous effort to make it the outstanding accomplishment in the year's program of work. Its value is so fruitful that it well merits that recognition.

Here in South Dakota, the highly prized pheasant has crowned many father-son banquets with dignity and esteem. Every boy likes to carry a gun, and "dad" is always glad to join the hunt—in case there is need for a sharper eye—for the bird that is properly prepared and seasoned, under the efficient supervision, usually, of the home-making instructor.

What may be the practice among chapters in other states, I am not able to say. Presumably some chapters are able to add spice and flavor to the evening's meal by securing venison, perhaps opossum in the south, or wild turkey in Kentucky. All in all it is a banquet carefully planned and managed, with each boy duly assigned a part to perform on the program.

The dads, and in some cases, mothers too, gather at the designated hour. They are greeted at the door by a boy whose duty it is to assist with wraps and direct his elders to the proper waiting room. Everything is quite formal. Some men recognize a neighbor and enter into a conversation over the general conditions of the times. Others again, if not well known or, by chance, a recent comer in the community, remain more or less in obscurity.

Announcement finally reaches the waiting group that everything is set for the banquet and that each person, provided place cards are used, is requested to find his assigned place at the tables. Then follows the sumptuous meal. A part of the program is sandwiched between courses, as the case may be. Still that feeling of formality prevails. A tension is sensed and each dirt farmer is conscious of the fact that this is a banquet.

Following the well planned program, the chairman dismisses the group after tactfully thanking the parents for their interest and participation in the program and for their contribution to the success of the event. A few small groups may assemble for a few moments before departing to express appreciation and good luck.

Such has been my experience with several father and son banquets. We failed to get the dads to mingle and a way to get the dads acquainted; some way to get them together for a social time and make them feel at home in the school. We found that a farmer living a few miles north of town perhaps did not know another "dad" living an equal number of miles south of town and that is true of all communities. Acquaintance, we felt, was the keynote to it all, so we devised a group of ten competitive games, located at different points in two adjoining rooms. These contests were simple in nature, but conducive to mixing and getting acquainted. We used the following: throwing darts, the bull's eye, a marble board, pitching rubber horse shoes, or a board with nails promiscuously driven here and there, each nail given a number and this a target at which common jar rubbers were thrown from a reasonable distance. Two boys attended to each contest and solicited the men to try their luck. Record of individual scores were tabulated and at the end of the first hour every man had rubbed shoulders and elbows with neighbors, strangers, and faculty. Each winner, determined at the close of the designated time allotted to the games, was presented with appropriate gifts. Strangers were made known, the known became better known. Each dad played at the games with considerable enthusiasm, while dignity and formality became completely absorbed in fun.

It bridged the gap between the time of assembling to the time set for the banquet or planned program. It developed enthusiasm and got everyone in the proper spirit, with a receptive and responsive mind for the remainder of the evening's entertainment.

Stimulating Interest Thru a Program of Work

ARTHUR A. ZEIGLER, Adviser, Bisbee, North Dakota

THE primary purpose of each teacher of vocational agriculture is to secure and hold the interest of his students. We, as teachers, have at our command an organization that may well be put to such a purpose. This is possible thru the formulation of specific objectives for the year by members of the local Future Farmers of America chapter. Interest is first aroused in the committee that meets to set up these objectives. This committee finds that many things may be done that are worthwhile and the chapter, in adopting the program, realizes that there are certain definite objectives to be reached.

Enthusiasm, once aroused, must be with the direct responsibility of their assignment. Frequent reports by the committee to the chapter are essential, and in the end we find an organization that is interlocked with but one purpose in mind, that of putting over their program.

We have adopted the seven major activity groups as recommended by the national and state associations. One committee is appointed to put over the objectives of each major grouping. The chapter has a year's work before it. There is no limit to the number of laudable undertakings that may be accomplished, and thru it you have instituted a very definite group objective.

"Plow Boys"

Buffalo Center, Iowa

"MR. ZARGER, how about the Buffalo Plow Boys giving us some good old-time entertainment at our meeting on Friday evening?" Questions like this have been arriving from local organizations, and even from WHO radio broadcasting director, and the Iowa State Fair entertainment committee.

Members of the Buffalo Chapter have organized an old-time Novelty Band. This band was formed from a nucleus of a three-dollar accordion, two ten-cent harmonicas, and a second-hand guitar. The boys who acquired these instruments soon picked up some old-time tunes and would bring the instruments along to our monthly meetings. It was not long until the other boys procured instruments and an old-time band was formed. From their profits on their projects and playing, new instruments were purchased and more harmony and skill of playing was produced.

The boys entered a county contest and were heard by a large audience. They have advertised the chapter in several similar meetings. They furnished music at the state 4-H club banquet and the state F. F. A. banquet during last winter. About 800 boys and leaders attover WHO, and they gave an old-time concert at the Iowa State Fair.

The value of such a band is very worthwhile. The boys themselves receive something that they never will forget when you realize the fun and educational trips they make thruout Iowa. Some of the boys never had been out of the county. It also stimulates pep and good times at our local meetings besides keeping the parents and citizens interested in our chapter.

Not every chapter has boys interested in music but the old-time tunes are greatly appreciated by everyone and the boys soon pick up tunes from the radio.

Ohio Chapter Owns Thirty Gilts

W. B. WOOD, Adviser, New Madison, Ohio

THIRTY Purebred Duroc-Jersey gilts, owned by the New Madison Chapter of Future Farmers of America, were placed in the hands of as many members at a recent meeting of the organization, to be developed and to raise litters of purebred hogs. These gilts are the result of the F. F. A. co-operative swine raising project started in 1932 when the group purchased a bred gilt and entrusted her to an F. F. A. member. Since that time boys have been raising litters and returning gilts to the organization to be given to other members. The plan has been popular with the boys, the original gilt and the remainder of the litter being the member's property after the contract is fulfilled. To date, only two gilts have failed in their productivity, making the total reach 30 this fall. Plans for the future include those for a purebred hog sale next spring.

An effort has been made to improve the quality of the breeding stock by purchasing a good registered male each year.

Form contracts are properly filled out and signed by all parties when a boy obtains a gilt. Copies may be obtained by writing the author.

Chapter Has Novel Swine Program

J. H. CONKLYN, Adviser, Bunker Hill, West Virginia

EARLY in the year 1934-35 the boys in the chapter who wanted to get started in the hog farming business and who were having difficulty in financing a start, conceived the idea of a chapter sponsored program. Under the leadership of their instructor, Mr. W. W. Eure, the details of the plan were worked out.

They immediately ran into several difficult problems. First, there were some who wanted Hampshire hogs while there were others who were anxious to get Spotted Poland China. After much threshing over the matter it was decided to buy two Spotted Poland China gilts and one Hampshire.

The gilts were well bred, registered, and treated for cholera and worms. They were given to three boys under contract to feed and care for them according to superior practices worked out in class under supervision of the Vocational Agriculture teacher. In return each boy and one from the second litter. After which the sow became the property of the boy.

To date there have been three excellent Spotted Poland China pigs returned to the chapter, which have been placed with other boys. These were registered by the chapter, but since they were younger and not bred, it was agreed that they return two pigs to the chapter. Also there have been two Hampshire pigs returned and placed with members under the terms of a contract drawn up by the chapter.

All sows have done exceptionally well, and so far the program has been highly successful. This year, in order to combat the difficulty of finding a boar hog of quality satisfactory to breed the sows, the chapter is buying a boar hog of each breed.

Before purchasing this hog a meeting of interested local farmers was called to advise the boys in setting up a suitable program and financing it. They responded splendidly. The father of one of the boys agreed to keep the boar for 18 months and feed and care for it as well as pay $2 for each boar service during the time, providing the boar would become his property. Other farmers supplemented the services the boys would require by agreeing to buy services at $2 each, paying in advance. Enough money was raised to pay for the hog in full at time purchased.

The chapter planned to be able by this fall to start each boy with a well bred sow. So far the demand has been far beyond the supply. We also hope to furnish local farmers with a source of good breeding stock and would like to be able to interest other chapters in buying from us. We expect to enter all our stock in the Hagerstown fair in 1936, and since all of our stock is from prize-winning ancestry we hope to make a creditable showing.

Future Farmers Honor the Dairy Cow

IN a recent movie benefit, the Newton, New Jersey, Chapter, Future Farmers of America, put four cows on the theatre stage before the spotlight and each night conducted a milking contest in which the chapter members competed. At a signal, they started milking and milked for three minutes, after which the milk was weighed. The results of the contest for the two nights were as follows: first, Cornelius Martin, 19.9 lbs.; second, Ernest Katzenstein, 13.2 lbs.; third, Raymond Coursen, 12.6 lbs.

In addition to the contests, the screen features included "The Hoosier Schoolmaster," News Reel, Mickey Mouse, and a Department of Agriculture talkie entitled "When the Cows Come Home."

Local cattle dealers co-operated in trucking the cows to the theatre and local hardware dealers, as well as the theatre, gave prizes. The first prize was $5.00. The boys' share of the receipts of the benefit are to be used for their spring trip to Washington, D. C.

Townspeople, dairy farmers, and theatre people seemed to agree that this project of the boys was a great success. The local theatre manager is anxious for

Tennessee Chapter Pioneers in Swine Show

THE Future Farmers of Jere Cooper chapter moved forward another step on the frontier when they staged the first swine show in memory of agricultural Grey Beards in West Tennessee. These boys exhibited a number of very fine hogs at this show.

Letcher Chapter Capitalized on Drought

IN THE face of a drought in South Dakota, the Letcher chapter has been doing things. "How can we raise funds when there is no money?" was the question raised by the boys. Thirty-six members acting as a unit, "learning while doing," started a program by making a "drought resistant crop booth" for the vocational department of the state fair. The money received from this endeavor, together with other chapter activities, made it possible for the chapter to take their annual trip to the Black Hills.

Maryland Chapter Provides School Service

THE inauguration of a school "Service Committee" by the Gaithersburg chapter of Future Farmers of Maryland, is the satelite in the year's accomplishments, according to Adviser James R. Ward. The special function of this committee is to render service to the school in the form of repairs and the construction of new projects. All school service performed by the agricultural department comes thru this "Service Committee." It is reported that this committee has brought about a real innovation in building a better spirit between the various school agencies and the local F.F.A. chapter.

The most outstanding project of the "Service Committee" for the last school year has been the construction of a general shop building, made possible thru the renovation of an old one-room school building. The boys contributed their work, and the total cost of the renovation did not exceed $150. Citizens of the community are loud in their praise of this type of co-operation. Above all the boys have assumed specific responsibilities and have had real training in improving their own environment.

Chapter Co-operation Aids in Drought Situation

THE Future Farmer organization offers an unusual opportunity for training a boy to meet emergencies, according to W. R. Bryant, a vocational agricultural instructor, in South Dakota. "Even tho we have suffered thru the severe drought which visited our area, our Future Farmers are ever surging forward to better and higher fields of American farming," said Mr. Bryant. This accomplishment can come thru co-operation. Chapter co-operation in seed testing, planning a carnival, giving a father and son program, taking an educational tour—these and many other ac-

Teaching Farm Management

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LAYOUT OF FARM		
13. Shape and size of fields and accessibility, etc.	50	
LOCATION		
LOCATION OF THE FARM IN RESPECT TO:		
14. Distance to market——miles. (principal markets)	40	
15. Highway (surface, etc.)	50	
16. Local markets (creameries, cheese factories, canneries)	30	
17. Shipping facilities (transport service, stock yards, etc.)	20	
18. Neighborhood (class of people, interests, organization)	40	
19. Labor supply	10	
20. Business conveniences (telephone, electricity, stages)	20	
21. Water supply (domestic, livestock, irrigation)	20	
22. Schools, churches, etc.	20	
IMPROVEMENTS		
23. Farmstead (location, layout, drainage, fencing, etc.)	20	
24. House (age, construction, arrangement, condition, etc.)	60	
25. Other buildings—list (age, capacity, construction, adaptability, etc.)	60	
26. Equipment (water system, light and power, etc.)	30	
27. Fences and gates (kind, condition, arrangement, etc.)	30	
28. Plantings (landscaping, family orchard, garden, etc.)	30	
29. Taxes (percent of value, other assessments)	10	
30. History (previous sales and prices, frequency, rentals, etc.)	20	
31. Speculative and comparative values	20	
32. Adaptability (to type of farming desired, size, soils)	30	
TOTAL SCORE	10	00

Remarks as to the price of land, buildings value reclamation costs, present major products, present gross income, present net income, special equipment, or special features of the farm: state below.

The Agricultural Progam and Public Relations

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soring a Smith-Hughes fair in connection with the 4-H club fair which had the previous year taken the place of the defunct county fair.

The need was felt for some appropriate recognition of the crops work in the school, inasmuch as the fair came too early, so a county grain judging contest was developed with all of the farm crops students of the county meeting annually during the last school week in December. The ribbon awards were furnished, and the contest was managed entirely by the F. F. A. chapter of the entertaining school.

The social side of life has also been developed with organized plans for interchapter athletic contests, annual Thanksgiving party, Father-and-Son banquets, "Ag.He." spring party with members of the Home Economics club as guests. The initiation ceremony certainly must not be overlooked or the public speaking contests; all have their place.

Certainly some of the most educational and inspirational contacts for both parents and boys were the annual project tour and class trips. Considerable time in careful planning is most assuredly justified by the contacts made and results obtained—do not go thru another year without the project tour as one of the major activities of a live organization!

From the public relations standpoint these activities have resulted in a wealth of publicity because: (1) All parents are interested in the activities of their own young people. (2) Newspaper articles are frequently used, and recent happenings of a varied character can easily be interpreted. (3) F. F. A. chapter newsletter, when they have participated in the event reported. (4) Exhibiting and judging at fairs certainly make for wide business and social contacts, and desirable publicity of inestimable value to the individual and the school. (5) Activity is the basis of any living organization.

Results of Evening School Program

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of an explanation, with blackboard illustrations, of how the program was to function.

This brought a typical evening school to a close. Each school is an individual problem since the work deals altogether with the present practical problems of the farmer of that particular community.

The following results were obtained from the four evening schools held in Dardanelle school district during the past year: 309 members enrolled; 7,500 broilers produced and marketed at a premium price; 20,000 pounds of Korean lespedeza were bought co-operatively at a saving of five cents per pound; 15 carloads of Bliss Triumph Irish potatoes were marketed co-operatively at an increase of 50 cents per 100 pounds over local market prices; one car of commercial fertilizer was bought co-operatively; practically every cotton producer in the district took advantage of the new soil conservation program; 75 new poultry flocks were started and 50 flocks improved; and approximately 300 farmers participated in the Arkansas Dairy Day sponsored by Blue Valley Creamery Company at Dardanelle.

This year with the aid of a national deputy the agricultural instructor organized two Granges in two of his leading communities. Interest developed for these came almost entirely from the evening school groups.

The year was climaxed with a very successful poultry show at which 300 coops of poultry were shown for which $150 in prizes was given.

Professor Gregory Takes Over New Work

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tural section and was chairman of the Detroit meeting.

He was one of a small committee which originated and promoted the idea of this magazine. In addition to having served continuously on the Editorial Board, he has been a frequent contributor and very recently has assumed the co-editorship of the Professional Section of the magazine.

The Agricultural Education Magazine is happy to extend its best wishes to Mr. Gregory in his new appointment.

Co-operation Practiced

Idaho—The Blackfoot Chapter recently purchased a registered Duroc-Jersey gilt with chapter funds to help a

Texas Makes a Touchdown

THE Texas Association of F.F.A., at their state convention in 1935, set up a goal of 12,000 active members for the year 1935-36. The newly elected officers, under the leadership of their president, Tison Barnes of Kemp, set about to build a program of work which would stimulate the 10,000 members to work in a unified way to accomplish their proposes.

The 385 chapters, filled with the desire of doing things on the state's 100th birthday and the inspiration furnished by national, state, area, district, federation, and local leaders, produced a growth to the extent of going over the goal for a touchdown. They now have 12,032 active paid-up members.

They want every state association to celebrate the victory with them by visiting the centennial during the remaining weeks. The centennial opened June 6 and will continue thru November 28, 1936.

Book Review

The first publications prepared under the auspices of the Iowa Vocational Agriculture Program-Planning Committee have just been released:

Occupations for the Agriculturally Trained. A teacher's guide for a unit on agricultural occupations. Dr. H. M. Byram, Department of Vocational Education, Iowa State College, author.

Future Farmer Chapter Management. Written for advisers, officers, and members by H. M. Hamlin, Department of Vocational Education, Iowa State College; H. T. Hall, executive secretary of the Iowa Association of the F.F.A.; and C. E. Bundy, adviser of the Iowa Falls, Iowa, F.F.A. chapter.

The School Agricultural Library. Suggestions as to uses and organization of the agricultural library, books which may be included. H. M. Hamlin and C. E. Bundy, authors.

Sources of Agricultural Information and Assistance. A teacher's guide for a unit designed to acquaint pupils early in their high school careers with standard publications and agencies useful to them in solving typical farm problems. H. M. Hamlin and C. E. Bundy, authors.

The F.F.A. Chapter Library. Largely devoted to a list of books which might be included in such a library. H. T. Hall, author.

About 25 other publications are in process. There will be announcements of additional releases two or three times a year. The publications vary in size from 16 to 96 pages. They are available from the Collegiate Press, Iowa State College, Ames, Iowa.

The members of the Program-Planning Committee are G. F. Ekstrom, state supervisor of agricultural education, chairman; F. E. Moore, state director of vocational education; H. T. Hall, assistant state supervisor; Paul Auringer, L. B. Hoopes, and R. A. Towne, teachers of vocational agriculture; Dean H. H. Kildee, Director G. W. Godfrey, and Dr.