The Dairy Judging Contest this month at St. Louis will be the climax toward which many judging trips such as this have been pointed.

One of the fundamental measures of the success of the agriculture teacher is the degree to which his pupils continue to be students of the farming business throughout their lives.—A. V. Storm
AGRICULTURAL EDUCATION

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THOSE LEADERSHIP CONFERENCES

To develop rural leadership among the members is one of the purposes of the F. F. A. This past year, we have received reports of leadership conferences held in several of the states. The Ohio, Georgia, New York, and Virginia conferences are excellent examples.

We quote from the July issue of "Chapter Chats," the bi-monthly publication of the Future Farmers of Virginia: "The new feature of the 1931 Rally was the establishment of schools for leadership. Schools were organized for presidents, vice-presidents, secretaries, treasurers, and reporters. These classes continued for two hours each during two days of the rally and an opportunity was given for the various officers to learn more about their respective duties."

Quoting again, we find in the June, 1931, issue of Agricultural Education that Ohio's Fourth Annual Leadership Conference committee "decided that the conference should have five purposes: first, it should seek delegates from F. F. A. chapters who could work with their home chapters a year after attending the conference thus manifesting their leadership and creative ability; second, it should give these delegates suggestions as to setting up proper aims and objectives, conducting better meetings, the use of direct parliamentary procedure, and, in general, making better officers; third, it should provide for the inspiration of the delegates by having them hear of the work done in outstanding chapters in the state and have them meet, hear and know the three American Farmers selected from Ohio last year; fourth, it should give the delegates a state-wide rather than a purely local view of F. F. A. work; fifth, it should provide participation for as many delegates as possible."

And in Agricultural Education, January, 1931, it is stated that the Georgia F. F. A.'s held a school for officers of Future Farmer chapters. That "the group composed of presidents and vice-presidents studied and discussed parliamentary procedure. The secretaries studied how to write minutes of a meeting, how and what records to keep, and the duties of a secretary in general. Treasurer studied how to organize and conduct a Thrift Bank. Reporters received instruction in writing news stories concerning the work of local chapters."

Such conferences are excellent to train the boys, especially the officers of the local chapters, to assume leadership among their fellows. They send the boys back to school with ideas they can utilize in carrying out the aims and objectives of the F. F. A.; they give them confidence in their ability to do things for the chapter; and they help to make the local chapters function better than otherwise. Surely, this is training in rural leadership. We may have more of these leadership conferences. It is suggested that state observers report their experiences with such conferences to the Future Farmer Editor—H. O. S.

MEETING NEW DEMANDS

As a result of science, invention and the effect of the "machine" upon industry, commerce, agriculture and the home, our civilization is passing thru a series of changes, the complexity of which is unparalleled in the history of the world. When we view the modern processes of production, the methods of transportation, the means of communication and the way we amuse ourselves, it appears as if there is no limit. We frequently wonder what is "just around the corner."

As a result of research, new discoveries and economic changes, examples of apparently modern methods in business and economic changes, examples of apparently modern methods in business and industry becoming obsolete almost over night can be observed daily. Likewise, the science of agriculture is going thru a process of evolution which demands of the present day farmer abilities unknown only a decade ago. The development of farm machinery, the results of agricultural experimentation, the changing wants of a consumer may oblige and the new conditions in domestic and world markets, have created a need for new farming skills, new knowledge, new managerial abilities and a new courage.

The importance of this situation was emphasized by Dr. Willis A. Sutton, president of the National Education Association, when he spoke at the American Vocational Association convention in Milwaukee last December. Dr. Sutton stated that, if the program in his school in Atlanta, Georgia, is so organized that the boy or girl who enters kindergarten and graduates thirteen years later is not in step with the business of that time or a little ahead of it, then the school has failed in performing its duty. Likewise, in planning our vocational agriculture programs, it is essential that the training which we provide for vocational agriculture students today function efficiently when they start farming tomorrow.

Vocational agriculture, during the short time of its existence, has apparently made contributions of value in the rural communities where departments have been established. We have faith in the future possibilities of the work. We believe that the program will continue to have a successful and permanent growth. However, if this is to be true, it is essential that vocational agriculture must always render a service which will be in keeping with changing farm problems. Therefore, it is necessary that supervisors, teacher trainers and instructors in the field of agricultural education recognize these changing conditions and plan their programs of work accordingly.

How can this be done? It is quite evident that no single formula can be given which will contain adequate plans of procedure. Possibly some general principles may be suggested. If our programs are organized in accordance with existing and future agricultural needs, then we should constantly attempt to discover what needs actually are. Former contacts must be maintained by all agricultural education workers with business, social, economic, marketing and agricultural agencies. Farm conditions must be carefully observed. Problems should be interpreted and analyzed in international and national as well as in local terms. Likewise, teacher training courses must be constantly revised. All practices of questionable or of no value must be abandoned. Obsolete material must be junked. New truths must be revealed as a result of adequate research. New ideals and courage must be acquired by all. Action must become a reality.

At least these things must be done if vocational agriculture is to continue to grow and function successfully in a changing economic and social order.—F. E. M.
Methods

The Use of Instincts in Teaching Agriculture

W. P. BEARD, State Supervisor, South Dakota

ANY agriculture teacher who is in any way measuring his results finds a big gap between the material that the boys know and what they put into practice. The effort in this article shall be to point out some ways in which the agriculture teacher will be able to capitalize on the instincts and sell information to the pupil to the extent that the pupil “carries on.” This article is not based on results of scientific experiments but merely calls attention to some ideas which have produced results.

The human being possesses certain fundamental instincts which determine his wants and therefore his action. Our problem, then, is to hook up with an instinct, the job to be taught. In this discussion, instinct means those fundamental wants or impulses which cause the individual to act. Some will say we should not appeal to instincts to get action but that we should appeal to the intellect. As before stated, we want action and appeal to the intellect alone does not produce enough action for vocational agriculture. This appeal to instincts is used in advertising. An analysis of the average advertisement for intellectual appeal usually indicates but a trace, but there is plenty of appeal to various strong instincts.

Our first main problem is the recognition of the instincts or instinctive wants we find in the farm boy. These are probably little different in the farm boy than in the city boy but they may be overlaid by attitudes which seem characteristic of rural people.

Handling an Adverse Attitude

Let us suppose the agriculture teacher is interviewing a farmer and his son, trying to influence the father to send the boy to high school. The father expresses a common attitude in, “What’s the use when we don’t get any rain.” This attitude may be used or opposed. The latter would be the doubtful choice since an argument would be sure to arise. This would be poor salesmanship.

A better way would be to find an advantage of this attitude and lead from that in some such way as this, “I wish more people looked at it as you do, then we could be better prepared for drouth, storm and frost. In our project planning we aim to get the boys to look ahead and see that nature is a big factor and to do what may happen. We find that the one who does this can be prepared and avoid much damage.”

Certain instincts will tend to keep the boy home, others will make him want to go to high school. If he has an “over-duty” of domesticity he will not want to come. One of the best ways of appealing to a boy of this kind is to show him pictures of the agriculture classes, letting him find boys he knows. An explanation that most of the boys in the class are farm boys and that he should come direct to the agriculture room when he comes in on the first day will all help to overcome this boy’s attitude of wanting to stay home. As a matter of fact most of the instincts involved later will be appealed to on this visit. The main point to keep in mind is to try to find the boy’s wants or interests and dwell on them.

Use of Instincts the First Day of School

The first day’s work should appeal to strong and common instincts such as manipulation and curiosity. A device for the former is rope work. This also appeals thru the instincts of approval, acquisition and mastery. The matter of rivalry should not be emphasized at first but should be reserved for the time when working for special recognition in rope work. In making use of curiosity, we should take something with which the boys are familiar and show many points about it they had never before noticed. One example might be the structure of the corn stalk. The class is taken to a nearby cornfield and the teacher calls attention by means of questions to interesting features of the corn plant. Of course, in most cases he also has to answer his own questions. This type of thing impresses the boy with the fact that he didn’t know these points and wonders why he had never noticed them before. One boy said, “I thought I knew all about corn but I soon found out different.” It is this change in attitude we get by such appeal to curiosity. The instinct is also developed for further use.

A sure appeal to the adolescent boy is thru his instinct to manipulate. Farm shop work provides this satisfaction in abundance. This first day in class he is given rope to manipulate and he learns to do certain things with it he had never done before, again using curiosity. As a matter of fact, only a suggestion is needed to get him to go home and show father and brothers. Here we have our manipulative and curiosity instincts supported by the instinct for approval.

Another instinct of importance in this first day is the instinct ofgregariousness. Many of the class will be strangers to the others, hence, this instinct is not at all strong within the group. However, the desire to be with the group should be initiated and developed rapidly that it may be used soon for other purposes.

The fact that the boy is among strangers and the whole situation is new makes him particularly responsive to sympathy. Here the agriculture teacher can do a great deal to inspire confidence which will mean results later. Furthermore, the teacher owes to the boy this help for in many cases it was he who induced him to come to high school. During this first day at school the boy should be appealed to thru many instincts.

Developing Shop Skills Thru Manipulation and Rivalry

Since our boys are farm raised they have learned a lot of manipulation and in many cases this instinct is fairly well developed but sadly in need of direction. One of the first problems is to overcome certain wrong habits in shop work. Ordinarily shop work is very attractive to these boys. It becomes necessary to find the habits that must be broken and then replace with proper ones. To what instincts can we appeal to get the boy to break himself of the habit of “strangling the hammer”? Of course, there should be an explanation of the proper way to hold the hammer. Experience shows us, however that here as elsewhere, reason alone often falls down due to a well fixed habit. Often it helps to call attention to the fact that women take hold of a hammer near the head and try to “push” nails into the wood. In most cases little further need be said, for group censure of feminity in members is quite immediate. A nail driving contest will capitalize on rivalry and by reason of inferior manipulation “woman fashion” is defeated.

Other manipulative skills, for example coping, are taught with another type of appeal. First it is often necessary in a more or less complex skill such as this appears to be to deal with inhibitions. The most common one is the idea, “I can’t do that.” Ordinarily this is very easily overcome by merely assuring the boy that he can, especially since lots of others have. When he is once started, the manipulative instinct has ful, play and when the first bird is off the table and alive, mastery and approval function strongly in producing the desire to do the job again. By the time a boy has done a few jobs of this kind he has confidence in himself and does not hesitate to do difficult jobs after a demonstration. Inhibition may have a small part, but mastery and approval are the big factors. In a class there is always the element of rivalry. In eapitoning, profit may have a remote influence at first but its main use comes later in inducing boys to compete. The work at home or for neighbors, but the biggest “kick” seems to come from showing off before others. A boy will tell with great eagerness how he did a certain thing for a neighbor.

Use of Rivalry, Display, and Gain in Project Planning

The planning of a project is often one of the most difficult jobs to motivate, probably because it is so far removed

(Continued on the next page)
The Unfamiliar Job

If the job is one with which the student has had little experience, such as buying a sow at an auction sale, the boy often has an emotional condition of mild fear or timidity. This condition should be reduced as much as possible by previous selection and setting of maximum price in conference between father, boy and teacher. If the boy is timid about bidding, the teacher may make the first bid and the boy will then more easily be able to make the next one. The boy will find it easier to bid by a motion than by speaking as he is much less conspicuous.

The Familiar Job

In case the first job in the project is a familiar one, interest is apt to be lagging and it becomes the teacher’s duty to see that new phases, factors and meanings are put into it. For a homely illustration, let’s take manure hauling. Certainly something of the composition and value of manure will add interest but the mastery of a situation as to efficiency of work will give a problem to challenge the boy’s abilities. Problems should be pointed out as to where to drive in loading and the plan of unloading so as to save the most time. At a later point one will find the boy has been recognized by the boy (or his father rather) and it sets up a definite thing for mastery. Psychologists tell us people are curious about unusual features concerning common things. Hence pointing out the many possibilities to adjustments on a plow is often all that is necessary to motivate plowing. A rare “kick” is the one a boy experiences on being able to show his father that he set the coulter in a certain way which will make the plow scour. The feeling of mastery would be greater in this than in a case where the father is not expected to know how to do the job.

Keeping Records

The keeping of records and making a report at the close of the project is a problem similar to the one in making plans. Here are more immediate and more closely associated with gains or losses and mastery. The prospect of having other classes analyze his records, of approval thru newspaper publicity, or of being elected State or American are most impelling motives for making proper final reports. The final report with its satisfactions may be used, but a system of grading at periods through the project and the inspection of the notebook by visitors appeal to his desire for approval. The satisfaction should be so conditioned that the satisfaction is in the mastery or production of a good piece of work rather than in the grade itself.

Securing Prompt Efficient Action

External pressure may eventually produce fixed habits along this line, as along other lines, as most people are not disposed to get up and move unless pressed. The pressure may be used in the case of a long period before farrowing it is necessary to hold before the boy some future competition or the gain in weight from week to week is a means of maintaining interest and makes an incentive of rivalry. If weights are taken rivalry gives way to curiosity and mastery.
Pacific Region Objectives and Policies for 1932

1. That we improve our publicity program by outlining a definite yearly program at summer conferences which will cover the special phases to receive emphasis each month of the year. Each state to present mimeographed copies of this outline at the next Regional Conference.

2. That 75 percent of the departments in each state conduct one or more evening schools. The above objective to include marketing schools in each state.

3. That one or more evening classes be organized and taught by trainees in each state maintaining a resident teacher training department.

4. That 20 percent of the project record books in each state be checked by the state supervisor or teacher trainer, and that a state-wide cost of production analysis be made of at least two major enterprises.

5. That each trainee check at least ten completed project record books for completeness—books to be supplied by supervisors or itinerant teacher-trainers.

6. That each state formulate a set of project standards for some of the major enterprises within the state and present them in mimeographed form at the next Regional Conference.

7. That each state plan and conduct district or state project contests and make a progress report at next regional conference.

8. That a chartered chapter of F. F. A. be established in each department in the region.

9. That each contestant in vocational agricultural contests be a member in good standing in an F. F. A. chapter.

10. That every state and territory he represented at the National F. F. A. Congress in November, 1931.

11. That each state organize in its resident teacher-training department, if one is maintained, an associate chapter of the F. F. A.

12. That 100 percent membership in the F. F. A. by teachers be secured in each state of the Region.

13. That our Regional Conference be based on a personally conducted analysis of the problems found in each state by the agent on his annual inspection trip of the problems of the various states of the region.

14. That each state prepare and present an analysis showing the need for new vocational agriculture departments in their respective states during the next five-year period.

15. That 100 percent subscription to Agricultural Education magazine in each state be secured.

16. That the Pacific Region requests that as a part of their program for 1932 the Federal Board for Vocational Education appoint a committee representing all four Regions for the purpose of summarizing the situations existing in the various states with regard to desirable co-operative relationships with industry and the occasional difficulties encountered by vocational workers from the efforts of industrial concerns to use our program for the purpose of advertising their products; that this committee formulate a simple, clear-cut statement of policy which can be used as a guide by both vocational education workers and industrial organizations for determining future relationships.

Seventh Annual Contest at St. Louis, October 10-12

VOCATIONAL agriculture teams representing various states will converge on St. Louis for the dairy, milk, and poultry judging contests to be held October 10 and 12 in connection with the National Dairy and Poultry Shows. Complete announcements of this event are contained in Miscellaneous Circular No. 7 just published by the Federal Board for Vocational Education. The dairy judging contest will be conducted under the supervision of R. D. Mathby of the Board and will start at 7:30 a.m. Saturday, October 10, in the main arena of the exposition buildings. Each contestant will judge a ring of four animals each, heifers and cows, including Holsteins, Jerseys, Guernseys, and Ayrshires.

Prizes for dairy cattle judging will include two scholarships in agricultural colleges of $400 and $250 each; true type dairy cow models; sets of books; gold, silver, and bronze medals; silver trophies, cans, watch earings, wrist watches, railroad trips, and official A. V. A. certificates. Approximately thirty-five teams will enter this contest.

The milk judging contest will be conducted under the direction of Mr. C. O. Henderson of Mississippi, Saturday, October 10, at 1 p.m. It will consist in scoring and criticizing seven samples of milk according to score cards to be supplied. The principal prizes to be awarded include two gold watches, sets of books, and A. V. A. certificates.

The poultry contest will be supervised by Mr. J. E. Hill, state supervisor for Illinois. It will be held at 8 a.m., Monday, October 12. Teams consist of two boys; rather than three and all judging is to be on the basis of production. Each team will place eight classes according to the placing card to be furnished. Birds used will be S. C. White Leghorns, Barred Plymouth Rocks, S. C. Rhode Island Reds, and Buff Orpingtons or White Wyandottes. There will be four birds in each class, either hens or pullets.

Prizes in poultry judging include gold watches, sets of books, gold, silver, and bronze medals, and trophy cups.

Dr. C. H. Lane of the Federal Board is chairman and manager for these contests; other members of the A. V. A. committee in charge are H. C. Fetters of Pennsylvania, E. H. Hill of Illinois, J. A. McPhee of California, and L. M. Sheffe of Georgia. Mr. O. E. Allen, agricultural director for the St. Louis Chamber of Commerce, has charge of local arrangements.

Utah Organizes College Chapter F. F. A.

THE Utah Collegiate Chapter of the Future Farmers of America was recently organized at the State Agricultural College, Logan, Utah. Its membership consists of teacher training students and former F. F. A.'s now enrolled in college.

The accompanying picture was taken at the time the Regional Agent, Mr. W. T. Spanton, visited the State Supervisor, L. R. Humphreys. On this occasion the Chapter arranged a luncheon and invited the heads of the various agricultural departments of the college. E.mer Wood, state president, F. F. A., and American Farmer, spoke on the organization in the state.

The collegiate chapter was organized to promote a better understanding of the F. F. A. and the duties of the advisor. A complete set of officers was elected and a program set up. A committee worked out a schedule of visits to nearby chapters. The chapter work has been given a definite place in the methods training.
Teaching Farm Shop Work and Farm Mechanics Thru Pupil Projects

G. A. SCHMIDT, Professor Agricultural Education, Colorado

For some time I have been convinced that much of the teaching in farm shop work and in other forms of farm mechanics can be done thru real pupil projects, or expressing the idea in other words, that the project method of teaching is especially well adapted to this type of school work just mentioned. I believe this because practically all the boys in farm mechanics classes are farm boys and all farm boys have abundant opportunities to select real projects in practically all types of farm mechanics work. Furthermore, and convinced for reasons to be made clear later in this article, that teaching thru real pupil projects is one of the most effective methods of instruction, this effective use, however, always being dependent upon the condition that ample opportunities for selecting real projects by the pupils exist in the subject being studied.

What Is a Project?

A project in farm mechanics is a whole-hearted, purposeful and life-like undertaking of considerable scope, conducted by the pupil and involving one or more farm mechanics enterprises in which he will actually receive the training he should acquire in regard to the enterprise or enterprises involved, were he to learn thru some other experience.

A project in farm mechanics is a definite piece of purposeful farm construction, repair, or overhauling work of considerable scope, involving one or more of the farm mechanics enterprises which are made the basis of instruction for the year's work, entered upon wholeheartedly by the pupil, and in the execution of which the pupil is going to acquire the educational growth—knowledge, skills, habits, attitudes and appreciations—needed to master the undertaking, and essential to the abilities which should be acquired from such an undertaking.

I should like to mention right here that the psychology and pedagogy underlying teaching thru pupil projects is exactly the same in every educational subject regardless of whether or not the subject lies in the field of general education, of vocational education, or of farm shop work or some other form of farm mechanics. In other words, a project is a project, and has all the elements characterizing a real project, regardless of the educational subject in the study of which the project happens to be chosen. The following definitions of projects, formulated by educators in the field of general education, are here quoted to illustrate the point in question.

1. "A project is a whole-hearted, purposeful activity proceeding in a social environment or more briefly, a hearty purposeful act." 14

2. "A project is a definite and clearly purposeful task, and one that can be set in accordance with seeming to him vital worth while, because it approximates a genuine activity such as men are engaged in real life. The project method is the solution of problems on the plane of real activity." 15

3. "The project, as used in teaching, is a unit of activity carried on by the learner in a natural and life-like manner, and in a spirit of purpose to accomplish a definite, attractive and seemingly attainable goal. In the project the learner participates in the planning and direction of his own activities toward the accomplishment of the goal, and for that reason experiences a feeling of ownership and responsibility for the success of the activity." 16

4. "The project conceived and executed by the pupil on the ground of his own experience is a still better basis for our educational efforts because it sets up in pupils self-determination and purposeful activity in a complete, natural, and well-rounded unit of effort. The project has the merit of a self-directed organization of mental and physical resources to achieve a well-considered result." 17

5. "A project is a teaching device and a learning device. It is a name for what happens when an individual sets about accomplishing a purpose and in carrying it out brings about changes in his knowledges, skills, habits, or attitudes. If the undertaking is worthy and the changes are desirable, we call the activity eductive. In teaching by projects the attention becomes focused upon the activities of the pupil rather than upon those of the teacher. The project method means providing opportunity for pupils to engage in living worthwhile enterprises so that they may reap, to the full, these possible benefits." 18

6. "To teach thru 'projects' means, in essence, to bring knowledge and skill to the learner thru the medium of problems for which he earnestly desires a solution. The word, problem, as used here, means real problems of actual life such as those that the farmer, the mechanic, the business man, and the housewife must meet and solve. Only when problems of this latter type become centers about which to organize skills and ideas is one truly applying the project method of teaching. The important feature of project-teaching lies in the attempt to make skill and knowledge dynamic from the outset. The materials of education are taught and learned in their immediate application to the solution of real problems or to the realization of whole-hearted purposes." 19

Characteristic Features of Projects

The essential elements or characteristic features found in all definitions of projects are as follows:

1. A definite undertaking of considerable scope by the pupil himself.

This implies that a project is not a little job nor a mere exercise, but a real, complex, and more or less difficult undertaking involving over a considerable period of time. The statement further implies that the pupil assumes full responsibility for all the activities involved in the planning and in the execution of the undertaking. A project is a self-directed activity.

2. An undertaking entered upon wholeheartedly by the pupil. This simply means that the pupil is vitally and intrinsically interested in engaging in the undertaking. It means that he is eager, and desires to do the task. It means that his heart and soul are wrapped up in it; in other words, he himself wants to undertake the task because he has an inner urge or a whole-hearted desire to do so.

3. A purposeful activity. This means that the pupil has clearly visualized, definite aims, objectives, or goals in mind which he wants to attain in conducting the undertaking, or expressing the idea differently, that he has strong, gripping or challenging purposes or ends in view which he wants to accomplish. He knows what goals he wants to reach. He approaches the task in an attitude of purposefulness. It is not an activity imposed upon the pupil by the teacher.

4. A life-like undertaking. This means that the undertaking is true to life that is natural and resembles similar undertakings done out of school.
by no means engaged in real work on real farms, the work of the project is devoid of academic artificiality.

5. An educative activity. This implies that the proper execution of the project the pupil will acquire the skills, habits, attitudes, perceptions and knowledge which he would acquire if he followed some other means of learning. Every project must be an educative device and bring to the learner those outcomes of the educative process that should be acquired by the pursuit of the subject. In other words, the learning that takes place must be such as contributes to the aims of the instruction; however, the educative outcomes are always to be the project worker as a product as he strives to attain his purposes.

An Example of a Real Project

Before going further into this discussion it may be profitable to pause briefly and to consider a specific project. The following situation is therefore described: In the first year’s work in a farm mechanics course an instructor has included the following farm mechanics enterprises as the basis for the year’s work:

1. Farm Sketching and Drawing.
3. Tool Sharpening.
4. Handle Fitting.
5. Harness Work.
7. Farm Soldering and Allied Work.

This year’s plan of work offers opportunities for four or five real farm mechanics projects which every boy in the class could select if he so desired.

In the second year’s work to the boys in the class, the instructor has decided to show the boys the possibilities of a good project involving two of the farm mechanics enterprises included in the year’s work; namely, Handle Fitting and Harnessing. Let us assume that he did this somewhat as follows:

“Boys, I think I can safely say that on the farm of every one of you there are many tools and small implements either with loose or broken handles or with loose or broken harnesses. I think I can also safely say that many of these tools, including saws, chisels, planes, axes, hoes and the like, are also dull and in other ways unfit for efficient use. According to our outline for this year’s work in farm mechanics I have tentatively allowed you six weeks of shop time to acquire training in fitting handles to tools and implements and in sharpening farm tools. You boys may either choose a project involving these two enterprises, or you may bring to the shop a job or two which to keep yourselves busy and I will also assign you other jobs and exercises to use the time set aside for this type of work.

For those of you who wish to choose a project covering these two enterprises I have here a mimeographed list of common farm tools and small implements found on farms, which may suggest possibilities for your project. I would suggest that you check on this list those articles you know are on your home farm which have broken handles, which are dull or in other ways unfit for efficient use, and when you would like to have in good condition, and then I would suggest that you each take the list home and show it to your father, if you wish, and perhaps he can check other articles on the list which he would be pleased to have put into good condition. Perhaps your mother, also, has some articles, similar to some of those listed, which she would like to have put into good shape. I am quite sure your fathers and mothers would greatly appreciate the services you boys could render them along these particular lines; here is a fine opportunity to do something for them. Think this proposition over and if you decide to make a project out of your work in these two enterprises, begin to organize or plan your project, and be prepared to discuss your plan with me within a few days.”

I think I am safe in concluding that most of the boys in the class will want a project involving these two enterprises. I think I am also safe in predicting that most of the boys will come back, after their home consultation, with a list of articles which they wish to repair so long that it will take more school time to get these articles into good condition than there is time tentatively set aside for this type of work. Furthermore, I firmly believe that if the instructor asks all the boys to bring to school all the articles they wish to repair as work in this project, the school shop will be so cluttered with articles brought in that there would be no room for the boys to work. Contrariwise, with the list which most farm shop teachers desire when they say: “My biggest problem in shop work is to keep the boys busy because of a lack of productive work.”

The project suggested above to the boys, that of fitting handles to tools and sharpening farm tools is typical of projects which could be suggested for other farm mechanics enterprises in the year’s work previously outlined; it is also typical of projects which could be selected in the second year’s work, in the third year’s work, and in the fourth year’s work, and in these farm mechanics courses involves these successive years of work.

I should also like to repeat that I believe that there is no subject in the school curriculum which can so easily be cut down on the lines that the boys are farm shop work or of farm mechanics because the boys in these classes are farm boys and opportunities for excellent farm mechanics projects, in all types of work, occur on practically every farm.

The Psychological Effects of Project Teaching

The following more or less generalized statements contrast the effect upon the attitude of mind of the learner when he learns through the execution of real projects and when he learns through some other experience.

1. In performing miscellaneous shop jobs or exercises, generally superimposed upon pupils by the instructor, most pupils lack an impelling motive to apply themselves vigorously to the tasks. Such tasks, as a rule, do not appeal to the average farm boy; he does not find them amusing or purposeful. Contrast this attitude toward school work of boys so employed with that which results with boys engaged by project work such as previously outlined.

2. The boys too often show little or no interest in the ordinary shop work where the project method is not used, but wherever boys in shop classes are engaged in good projects and whenever these are well managed, the attitude of the boys change to one of interest, intense application, whole-hearted desire and ambition and they have a more wholesome attitude toward school work.

3. Whenever the pupils are engaged in real projects they assume a great deal of the responsibility of their work.

4. Quite often, after work on real projects has been introduced into the shop course, the boy regarded as stupid, very slow, or even almost helpless, begins to show much common practical sense, considerable power of self-direction, skill and an understanding of facts and theory to an astonishing and almost unbelievable degree.

5. Half-hearted efforts, attitudes of indifference, inattention, boisterous mischievous conduct and disrespect for the instructor generally disappear in shop classrooms when opportunities to learn thru real projects are substituted for the "prescription method" of attempting to keep the boys busy in the shop.

6. Boys engaged in good projects want to learn; they ask for much related and supplementary reading material, and ask for extra time in the shop the moment they identify themselves wholeheartedly with their tasks as do they when they are absorbed in completing projects.

7. As a rule, the ordinary farm boy has no real need and feels no immediate need for what is ordinarily taught on the exercise basis. Every real project in farm mechanics immediately creates the real needs for knowledge and skills and the project worker wants those.

8. Problems confronting boys in their projects challenge the boys to solve them because they are the boys’ own problems. It is essential for boys to take an indifferent attitude toward problem solving when those problems are not definitely their own, but are assumed ones, or in other words, are the "other fellows problems."

"Our part-time program in Wisconsin seems to be going forward in splendid shape. I had before me a report of December reports from 21 part-time schools with an enrollment of 479 farm boys, L. M. Buechel supervisor of Agricultural Education, Wisconsin."
Specialists in Evening Class Instruction
M. J. FIELDS
Vocational Agriculture Teacher.
Crawford, Texas

WE BEGAN our evening class in dairying early last January. The school was scheduled to run for 12 nights, meeting on Tuesday night and Thursday night of each week. The meetings grew in interest and continued regularly, with the exception of one night which was too rainy and cold to meet. The subjects taught were as follows:

1. Feeding the dairy cow.
2. Feeding the dairy cow (continued).
3. Winter feeding and pastures.
4. Handling and sanitation of milk.
5. Housing and care of cows.
7. Cow testing work and results.
8. Grading up of a herd.
10. T. B. and contagious abortion.
12. Purina dairy show.

The lessons were conducted in the nature of round table discussions and were led from time to time by men of wide reputation on a given problem. Mr. Paul G. Haines and County Agent J. E. Smiler assisted in teaching the feeding lessons. The discussion on handling milk was led by Mr. Clyde Hays, city chemist of Waco. Cow testing led by Dr. Collins. He gave a lantern slide talk. It was rather unusual in that the slides were of his own herd. Dr. T. T. Christman gave a lecture on T. B. and contagious abortion. All other lessons were handled by myself.

At the close of the evening school a banquet was given in the high school gymnasium, at which 200 people were seated. Besides the members of the school and their instructor, there were present for this occasion other farmers, business men of the town, Borden Milk Company officials, and a number of agricultural workers. A program which was educational as well as entertaining was carried out during the evening.

The average attendance maintained during the evening school was 26.4 exclusive of the night the Purina Dairy Show was put on, and the night of the banquet.

Subject Matter Important
FRATE BULL
Jackson, Tennessee

THE factors to be taken into consideration in selecting a course for an evening class are the same as should be considered in selecting a course for an all-day class. However, we are not sure that quite a number of courses for all-day schools have not been poorly selected. In many cases all-day students must attend school and they are required to take a number of high school subjects that they may or may not want and in some cases may or may not need. If they do not like the information that the teacher of agriculture gives them, they have to take it and continue to come to school just the same.

Such is not the case with adult farmers. Dr. H. O. Sargent, Federal Board for Vocational Education, makes this very plain when he says: "A horse will not stand up to the manger unless there is hay in the rack and neither will a farmer attend an evening school unless there is something there he wants."

"The secret of success in this evening school seems to be that the course was based entirely on the needs of the farmers in the community," said Mr. J. H. Pearson, part-time and evening school specialist, Federal Board for Vocational Education, after a two hours' conference with Mr. W. S. Baldwin, Milan, Tennessee, Master Teacher, 1929. Mr. Baldwin's school ran two nights a week for 12 meetings with a total enrollment of 125 adult farmers. As supervised practice work, these farmers terraced 244 acres of land, applied 535 tons of ground lime, home made and applied 112,400 pounds of commercial fertilizers on 375 acres of land, increased their number of livestock by 65 head, put out successfully 45 acres of clover, and improved 90 acres of permanent pasture. Earned earnings of the farmers due to this evening school were estimated at $16,006 for the first 12 months after the school started.

Mr. Baldwin used the following methods in deciding how much formation farmers need and want in evening schools:
1. He made and studies farm surveys.
2. Personal talks with farmers in the community.
3. Studies that have been obtained on farms in the local community and nearby communities.
4. Studies that have been obtained at the nearest experiment stations.
5. Studies available markets.
6. Held conferences with groups of farmers.

Teaching Thru Farmers' Clubs
T. M. DEAN
Turbeville, Virginia

IT IS possible to do evening class work thru farmers' organizations. Indeed, it is often more simple than going out and organizing a group solely for an evening class. The problem is getting the farmers' organization first, or finding the community with a local farmers' club.

Since in a majority of rural communities there is a club, many instructors will find it necessary to lead their farmers into the formation of a purely local farmers' club which may or may not become affiliated with a national farmers' organization. That there is a need for such organization goes without saying. The instructor need not worry for lack of support if his farmer patrons are meeting with him at regular intervals in his department provided he is a teacher capable of leading his group through others and can accept the responsibility of planning a community farming program and lead his group to set up very definite annual objectives within this program.

There exists at Turbeville, Virginia, a "Men's Social Club" thru which the instructor has been able to conduct evening class work for the past several years. This club was one of the agricultural instructor with the assistance of the very able high school principal. We read in their constitution that the purposes of the club are to (1) promote a spirit of friendship and mutual understanding among the farmers of the community and their neighbors, (2) to provide wholesome entertainment and social intercourse for its members and the community, (3) to promote the interests of the schools and churches and all other agencies for good in the community, (4) to develop better agriculture in the community by means of fostering organized instruction in both the night school for men and the day school for boys; and by being mutually helpful. Another article declares that it shall be strictly non-partisan in any political, religious, economic, or other controversy that may arise within its sphere.

This club has its objective committee which is a part of the instructor's advisory committee. Each year definite objectives are set up and these may include plans for an evening class on some farm problem. It is true that other activities take up the time of many of the meetings, but thruout the year ample time is found on the bi-monthly programs for the evening class to do good teaching. In fact, he finds himself largely responsible for the programs of the club, and if he does not include an evening class program in his plan it is his own fault.

Not all the members of the club can be enrolled as evening class students. Only those who carry out the improved practices taught are designated evening class students.

This club serves the same purpose for these farmers as the other civic clubs serve for the business and professional men in our towns and cities, and at the same time offers a splendid opportunity for the agricultural instructor to teach the improved farming practices needed in the community. This particular type of organization is unusual to five other communities of Halifax County, Virginia, since the one at Turbeville was organized some ten or twelve years ago. Much could be said about the many benefits of this little organization but to keep this article is merely to indicate that evening class work can be conducted easily thru permanent farmers' clubs and that the problem of organizing the class becomes a simple matter from year to year. The club may be organized first or the evening class may be organized first, with the permanent club growing out of the evening class group. In either case, there are certain rather definite rules which must be complied with.
Variety in Evening School Instruction

W. B. McDougall, Director, Atlantic County Vocational Schools, New Jersey

EVENING class work is conducted in Atlantic County, New Jersey, where there is a County Vocational Board of Education and a county unit for adults and has been for several years a major operation. Approximately 90 percent of the enrollment is comprised of adults.

An entirely different type of instruction may be prepared for these men than must be organized for high school pupils. There are several reasons for this, two of which are of prime importance: (1) These adults have the entire farm and family responsibility on their shoulders, and may be more thoroughly familiar with certain ordinary farming practices than the average agricultural instructor, but are weak in a few of the operative or managerial skills; (2) They wish to receive help only with their known or proven problems.

The use of farm surveys of practices in the area is perhaps the best method to determine the individual weak spots. Regular supervisory visits bring out many of them, but by carefully listing practices on a survey sheet, a real picture of the situation can be made. In order to present the information in a practical, concrete, and interesting way, there are numerous methods which may be used. The experience gained in Atlantic County after 16 years of evening classes showed that not any one method of presentation can be followed through a complete course of courses. Methods must be adapted to the man in the class and to the outside aids and information available.

By and large the combination of instruction and conference type of evening session work is probably the most available and popular. Film strips where available, selections from lantern slide sets, charts, specimens, and some few movies can be used to advantage in presenting instructional material dealing with specific problems. Occasionally, well-known farmers, experiment station specialists, or state department of agriculture men may be secured to present certain specific matters to the farmers.

Two other methods of teaching used very successfully are the observation tour and the demonstration class held on the farm of one of the members where an operative job is taught and each man has an opportunity to perform the operation himself. Skill may not be developed at the meeting, but a reason for the operation and a knowledge of the steps are obtained.

To illustrate the nature of problems used for meetings, a list of problems in the evening class courses in 1929—1930 in Atlantic County is given:

A. Corn-Crop Potatoes
2. How to Grow A-1 Sweet Potatoes.
3. Fertilizers for Sweet Potatoes.
4. Controlling Lice and Mites, and the like.

B. Poultry Course
2. Care of Laying Flock.
3. Vaccination of Chickens for Pox.

4. Controlling Lice and Mites, and the like.

If the instructor is really on the job and presents year after year those topics which the men want to learn about, he can continue to draw an attendance at each meeting. Some of our groups have been meeting for a number of years and each year discussing the same farm enterprises. There are records of men attending for eight and nine years, some even longer. New men in the district are visited and invited to attend classes. One of the drawing cards for good annual attendance is supervision which has produced results on the individual farms.

Evening Class Essentials

J. H. SIMS
Teacher of Vocational Agriculture, Lyons, Georgia

MEN may be reached in many different ways. Some like entertainments; others will travel for miles for a "feed," but all men are appealed to when the problem of making a living is to be studied. This is the secret of the success of evening classes everywhere; and the classes in the Marvin-Yancey school in Toombs, Georgia, are not exceptions. That this is evident is shown by the fact that the farmers attending these classes insisted on having a meeting every night for the duration of the classes.

The evening class on "Increased Crop Productiveness by the Use of Winter Legumes" held in this school in September, had an average attendance of 20 farmers from an enrollment of 40.

The class so influenced board members who were present that this winter they authorized the use of the school trucks to bring in an evening class to be held on "Hog Production." This evening class had a total enrollment of 122 farmers with an average attendance of 60.

In conducting these classes I found that there were several essentials of success in any class.

First, it is necessary to advertise the meetings. This I did by making personal visits to each farmer in my school area; by announcements in the school; by placing posters at the main gathering places of the farmers; by use of the telephone, and by personalized reminders and thru the cooperation of the Future Farmers chapter and the school trustees.

A comfortable location for the class is one of the main essentials; good lighting, a well-arranged blackboard, and attractive charts, I find are most necessary in conducting a successful class. A cold room means a cold class and poor lights dim the enthusiasm of what would otherwise be a bright class.

A third essential to success is that each meeting be conducted towards a definite end. A meeting without an objective does much to kill the interest of evening class members. Facts are necessary in order to proceed to an intelligent solution of problems. The first responsibility of the teacher is to get the most pertinent facts available on the enterprise with which the class is to deal. These facts must be of such authority that the farmer is willing to accept them. It is necessary to chart local facts on the blackboard as drawn out by conference procedure as well as those facts drawn from controlled experiments. After getting the facts, and correlating his own experience with the results of controlled experiments, the farmer is able to arrive at a very definite conclusion.

From the results obtained from my classes in the Marvin-Yancey school these factors of success have proven to be guarantors as well as essentials.

Winter Study of Fertilizers Prepares for Spring Planting

Rode Hughes
Petal, Mississippi

The farmers of the Petal community interested in evening class work met once a week during the months of January and February to study fertilizer problems of cotton and corn.

There was a total enrollment of 25 adult farmers. The meetings were held from 7 to 8 p.m. in the agricultural building under the direction of the Smith-Hughes Teacher. The information and data used in these classes was obtained from the local experiment station, however, the experiences of the farmers themselves proved to be very helpful in finding solutions to many of their problems.

The farmers chose the problems that they were most interested in. This choice of problems was determined thru leads obtained and recorded by the agricultural teacher in his individual visits to the farmer. The first visit was made entirely for the purpose of obtaining these leads and stimulating interest in studying problems. Before the second visit this information was summarized and the first problem was selected. On the second visit the problem for study was announced along with the place, time, and length of break planned.

After each meeting the farmers were visited for the purpose of supervision, obtaining more leads, creating more interest and making necessary announcements for the next meeting. The supervision was of such nature as to explain to the farmer any question that was brought up and studied at the meeting which he did not understand. These follow-up visits were received with much interest and were a big factor in holding up and increasing the attendance.

Encouragement was given to the prospective members to attend thru visits made by the teacher after each of the first three or four discussions and with him the results of the class studied. Interest was usually aroused and questions were asked which led to an invitation given him to attend the next meeting where such questions would be studied and conclusions made. In this way and thru publicity given by those attending, 70 percent of the farmers in the Petal community were enrolled in organized evening class instruction this year.

Wanted—A Full Meal

Y. CRAIG in the October issue of the Texas Outlook—"It is becoming increasingly apparent that the much talked of farm relief is inseparably connected with the problem of rural education. Our custom of serving the country children with the fragments which fall from the cities' educational table is not calculated to make ambitious boys and girls satisfied with rural life."
Supervised Practice

Recent Developments in Farm Records

JOHN A. HOPKINS, Jr. Department of Agricultural Economics, Iowa State College

FEW branches of agricultural methodology have undergone more profound changes in the past 10 years than the methods of keeping and using farm records. Ten years ago attention was focused on figures showing the financial cost of production per bushel of corn or per hundred pounds of gain on hogs. If, for instance, the cost of corn was found to amount to 60 cents per bushel as compared to a price of 75 cents, while the cost of oats was 40 cents, as compared to a price of 35 cents, then the inference was that the farmer should grow more corn and less oats.

In order to obtain these "cost" figures it was necessary to keep elaborate cost accounts which were troublesome beyond the patience of the great majority of farmers. If the farmer desired to keep a simpler record he found there were no methods which would give him any important facts beyond his gross expense and gross income for the year. By such simple methods as were then available he could ascertain whether he was making a profit or a loss, but he could hardly locate the specific weaknesses in his farm business that were responsible for the loss unless he resorted to cost accounting, and this he could not do well without a trained accountant.

It was not long until agricultural economists began to point out that the "cost" per bushel of corn or of oats meant very little, and in fact that it was seriously misleading. At the same time farmers shook their heads over these figures and looked decidedly dubious. The farmer might well say, "But how can I raise more corn and less oats?" In order to get even my present yields, I must keep my rotation which contains a legume to help maintain fertility of the soil. To raise the dover I need the oats as a nurse crop. Further, I am already raising all the corn I can take care of with my present supply of labor. It is true that the oats add very little to my income, but without them I would not have enough to keep me busy after the corn is laid by in the summer. I would be put to a greater trouble and expense to maintain my soil fertility, and my loss would be greater than it now is."

The economist would admit the objections of the farmer and would reinforce them by pointing out the large number of necessary allocations of expense necessary to computing the cost per unit of any individual crop. Why should corn and the dairy cows be charged for labor at the same rate per hour, when the dairy may be kept largely to provide something to do in winter and other slack seasons? Why should corn and oats be charged the same rate of rent per acre when the oats are raised partly to aid in maintaining fertility for the benefit of the corn?

How to distribute the interest and depreciation on the buildings among various enterprises? Indeed, why try to distribute this expense at all? The barn has, perhaps, been on this farm for many years. Its original cost has been forgotten. The farmer's practical problem is simply to make the most profitable use of it that he can. In short, the entire farm business must be treated as a unit.

Since each of the different enterprises is so closely related to the others, attempts to analyze one at a time are very largely fruitless.

To answer the need for a method for choosing between enterprises, as between oats or wheat, or between feeding a carload of cattle or breeding several more sows, a budgeting method has been developed. In the application of this method, a budget for the probable farm expenses and receipts is drawn up as it may be expected to appear if the cattle are fed. Then a similar budget is drawn up without the cattle and with the extra money thus accumulated. If these anticipated net income for the entire farm promises to be larger with the cattle than the hogs, then the cattle feeding enterprise may be adopted.

The budget will compare not simply the expenses on cattle in one case and on hogs in the other but will show how the expenses for the whole farm will be affected. Thus, one enterprise might take more labor than the other, but it might still be unnecessary to hire additional labor, since it might require the labor at a time when other farm work is slack. Or the cattle might need roughage which the hogs do not, and yet it may be part of the requirement from corn stalks which are at present being only partly utilized.

In order to obtain the specific information needed in making up such a budget, and in order that the information may pertain to the specific farm under discussion, it is necessary to keep various farm records. The information obtained from the farm records, however, is of use in other regards than simply in making up an occasional or a yearly budget. The records give us an opportunity to compare the performance of the plans which we have been attempting to follow. They should show us the gross income, the expenses, and the net income so that we may be able to apprise the success of each year's operation. They should also, if carefully planned, enable us to analyze the operation of the different sections of the business in order to locate elements of weakness, and work out methods of correcting them.

It may be of interest to sketch briefly the general process by which students in farm accounting at Ames analyze the records of farms with which they work in class. First the organization of the farm is examined both in its physical and its financial aspect. The record of crop surpluses, numbers of each type of livestock, the supply of labor, and the equipment on the farm is examined. Next the financial standing of the business is examined from the financial statements or balance sheets at the beginning and end of the year. Not only the net worth of the business but the sources of borrowed capital and the proportion of the total capital invested in each type of asset is studied and criticized in the light of the conditions and purposes of that particular farm.

Next the operation of the farm during the year is examined. In this analysis use is made of both the financial records of receipts and expenses and the records of physical production of eggs, butterfat, gains on hogs or cattle. In this analysis the first step is to study the performance of the farm business as a whole. Such figures are used as the gross income from the entire business, the ratio of expenses to total income, rate of turnover on capital, income per crop acre, income per 12 months of labor used on the farm, and of course net farm income, and profit or return to management.

After appraisal of the outcome of the farm as a whole, the next step is to examine each important section of the business in greater detail to find whether it is performing as effectively as it should and whether it articulates smoothly with other parts of the business. The crop system is usually examined first since the crop production conditions livestock production to a considerable degree. In this connection we need to consider the selection of crops and whether they are combined into the most productive rotation that the farm is able to support. The yields, of course, serve as the principal indication of success of the soil management program.

Next the livestock system comes in for a careful examination. Here again the first question is whether the livestock enterprises articulate well with the crops and with the labor and equipment available and whether they yield a satisfactory return per hundred dollars' worth of feed consumed. The next step is to look inside each separate enterprise to see whether its returns could be improved. Here again resort must be had to physical rather than financial records. Thus in studying the hog enterprises we want to know the number of pigs weaned per litter, the gain per day on fattening pigs, the composition of the rations, whether the pigs were raised on clean pasture, and a number of other facts showing the (Continued on page 64)

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MEDIAN OF TWENTY-FOUR STATES FOR QUESTIONNAIRE STUDY OF USE OF SUPPLEMENTARY FARM PRACTICES.

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<thead>
<tr>
<th>Percent</th>
<th>Requirements and Presentation—</th>
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<td>Require supplementary farm practice in some form.</td>
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<td>Require a minimum amount of supplementary farm practice.</td>
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<td>Require all supplementary farm practice outside of school time.</td>
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<td></td>
<td>Require students to outline a program of supplementary farm practice work early in the school year.</td>
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<tr>
<td></td>
<td>Teach the jobs and test the students’ learning thru supplementary farm practice.</td>
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<td>Require supplementary farm practice work to follow immediately after teaching the job.</td>
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Analysis and Supervision—

| Have supplementary farm practice jobs analyzed by the class. | 65.5 |
| Have supplementary farm practice jobs analyzed by students individually. | 67 |
| Have students write plans for doing supplementary farm practice jobs. | 21.5 |
| Have students submit a report of completed supplementary farm practice jobs. | 44.5 |
| Have a form for students to use in making reports on completed supplementary farm practice jobs. | 10.5 |
| Have parents sign reports of completed jobs in supplementary farm practice work. | 3.5 |
| Supervise the student in performing supplementary farm practice jobs. | 80.5 |
| Inspect completed jobs of supplementary farm practice work. | 86 |

Recording and Crediting—

| File a student’s report of completed supplementary farm practice work. | 30 |
| Have students keep record of completed supplementary farm practice work in own notebooks. | 31 |
| Have a special form for their record of completed supplementary farm practice work. | 15.5 |
| Include supplementary farm practice work as a regular part of the students’ credit. | 35.5 |
| Give added credit for supplementary farm practice work. | 20 |
| Fail students who do not have a minimum amount of supplementary farm practice work. | 14 |
| Encourage and instruct in supplementary farm practice for which no credit is given. | 80 |
| Give credit on regular chores. | 10 |
| Give credit on regular field work as supplementary farm practice work. | 17 |

Outcomes—

Say supplementary farm practice work intensifies interest in class work. | 100 |
Say supplementary farm practice work makes the instruction more vocational. | 100 |
Say supplementary farm practice work approaches the project as a teaching device. | 79 |
Say they are enlisting upon the use of supplementary farm practice work. | 80 |
Say they do considerable teaching to parents thru supplementary farm practice work. | 100 |
Say supplementary farm practice work is an efficient method of improving local farm practices. | 100 |
Say supplementary farm practice work attracts attention outside the students’ families. | 62.5 |

The findings presented above indicate that supplementary farm practice work is a form of supervised practice possessing potentialities scarcely realized and supply not developed. Supplementary farm practice seems to have two distinct purposes. It supplies the final step in instruction on jobs that are not a part of the project program and it provides as a means of introducing improved practices on the home farm and into the local community.

Certain Recommendations

The whole program of supervised practice will be expanded by enlarging upon the use of supplementary farm practice work. Certain apparent weaknesses when corrected will render this activity much more effective.

It would seem expedient to provide a definite place in the program of vocational agriculture for supplementary farm practice work, and provide more school time for this activity. It seems advisable to develop a program of supplementary farm practice work for each boy early in the course, arranging the teaching order, thereby facilitating the application with or shortly after study of the job.

Jobs that merit the attention of class and individual analysis would appear to be worthy of carefully planning their execution; and jobs worthy of supervision and inspection by the teacher when completed, to merit a complete and accurate report by the student. One would assume that tests made by students should be filed by the teacher and proper provision made for keeping these records.

It is evident that work definitely a part of the course would be given due recognition and a definite part in the student’s grade in this subject. When supplementary farm practice work is graded as a part of the instruction, chores and regular field work would have no place in the program.
Activity Double Plus

WALTER BUTE, Vocational teacher at Licking, Missouri, took over his job a few years ago without previous teaching experience at an initial salary of $2,750. This was pretty good for an inexperienced young man just out of college and Bute determined to show the folks that he was worth it.

This last February, he turned in the following report of his activities for the month. As you read it, keep in mind that it is not in complete detail and that all this time he was handling two classes of country boys from 9 to 3 daily. He is also operating a small farm at the edge of town, with hens and eggs as major enterprises. You may not approve of some of these activities, but he seems to be accomplishing a great deal.

Sunday, February 1.

Went to church in the morning.
Drove to Reese after dinner for legal records for a special breeding
pen of Mrs. Chas. Nob.
Visited the Junior Project of Opal
Bignman while in the Reese Country.
Copied minutes of last month’s Vocational
Teachers Association meeting in my secretary book.
Wrote a Bovine Tuberculosis article for the Mountain Grove Journal to
help Joe Flint put over the T. B. cam-

paign in Wright County.
Prepared 90 circular letters announc-
ing the Farmer’s meeting here.
Total miles traveled, 31.
Farmer inquiries, 2.

Monday, February 2.

Taught school 9 to 3.
Talked to Bill Block with Ot. Johnson
during the noon hour.
Immediately after 3 went to Cabool
to a meeting of the Texas County
Vocational Teachers Association.
Got home at 12:30 and wrote article
on farmers’ meeting for Friday’s pa-
per.
To bed at 2:30 a. m.
Total miles, 73.
Farmer inquiries, 1.

Tuesday, February 3.

Began 7 a. m. Explained government
seed loans to the three feed dealers,
before school.
Taught school until 10:30.
Went to Jefferson City for interests
of a larger T. B. appropriation.
Interviewed various legislators and
met with appropriations committee
until 11:30.
Talked with state supervisor for
vocational agriculture until 1 a. m.
and back in the hotel talked over
day’s events until 2:30 a. m.
Total miles, 95.

Wednesday, February 4.

Drove from Jefferson City to Licking
arriving here at noon.
Had my afternoon class as usual.
Filled out my first farm loan applica-
tion, 3 to 4:30 p. m.
Drove to Houston for a business con-
ference, with Mr. Gibbs.
Got home about 7 p. m. and wrote an
article for the paper on seed loan
Monday for farmers.
Addressed 88 envelopes for farmers
meeting circular letters.
Total miles, 124.
Farmer inquiries, 5.

Thursday, February 5.

School 9 to 3.
Tested milk samples 3 to 3:30.
Sorted M. F. A. check book stubs
from August 1 to January 1 and
brought them home.
Looked up and recorded the daily
price of eggs to be used in my poultry
survey work.
Wrote a business letter to W. W. Hoy,
Cabool, Missouri.
Total miles, 3.
Farmer inquiries, 1.

Friday, February 6.

Filled one seed application before
school.
School 9 to 3. Wrote lesson plans
during noon hour.
Tested 9 samples of milk after school.
Visited Junior Project of Austin
Stevens, north of town.
Culled 54 chickens for Mr. Mosier.
Looked at a Jersey heifer at P. B.
Bennett for Lynn Cameron.
Wrote, typed and dictated a constitu-
tion and by-laws for the South
Central Dairy Association.
Total miles, 20.
Farmer inquiries, 7.

Saturday, February 7.

To Bert Thornton’s on business.
On to Davis Stark’s to doctor a sick
cow.
From there to J. R. Wilson’s to doctor
a sick steer.
Didn’t take time for dinner as farmers
were wanting seed loans when I got
back to town.
Wrote seed loans from 11:30 to 7 p. m.
Came home and played with a call to
visit a sick project animal at
Kessler’s.
Went to a party from 8:30 until mid-
night.
Total miles, 16.
Farmer inquiries estimated at 40.

Sunday, February 8.

Graded animal husbandry notebooks.
Cleared up letter writing and other
incidental jobs that had piled up dur-
ing the week.
Wrote article for Licking News.
Worked on data collected in the
poultry survey.
Mr. George Kessler came for advice
on a sick cow and to get information
on a government seed loan.
Spent about 2 hours here.

Monday, February 9.

School at regular time filled seed
loans during the noon hour and again
from 3 to 5.
Talked to two merchants regarding the
sale of oleomargarine and got their
verbal agreement to quit.
Finished filling out and checking the
seed applications up to this date.
Prepared new postoffice building for
tomorrow’s meeting.
Total miles, 2.
Farmer inquiries, 6.

Tuesday, February 10.

Built fire and otherwise finished pre-
paring for the meeting.
Taught school until 10:15.
In meeting until 4:15 except an hour
at noon during which the other voca-
tional teacher had dinner in our home.
Wrote seed applications until 6 p. m.

Wednesday, February 11.

One crop loan written before school.
Cleaned up from the meeting yes-
terday, and taught school until noon.
Wrote another seed application during
the noon hour.
At 3 p. m., I went to O. O. Taylor to
get another seed blank. Broke car on
trip and while it was being fixed got
another merchant to agree to sign up
for cow butter.
Had a rather important conference with
Mr. Potter of the Frisco railroad
until 6:30.
After supper wrote two business let-
ters and studied until 10:30.
Total miles, 2.
Farmer inquiries, 4.

Thursday, February 12.

School from 9 to 3.
Visited projects until 4 p. m.
Got the remaining merchants, hotel
and restaurant keepers to agree not to
sell oleomargarine.
After supper wrote the oleomargarine
agreement to be signed tomorrow.
Had callers who stayed until 10 p. m.
Wrote a letter regarding some project
cattle thereafter.
Ready for bed at 11:30.
Total miles, 8.
Farmer inquiries, 8.

Friday, February 13.

School as usual.
During noon hour signed every availa-
ble source in Licking to stop selling
oleo.
Helped John Gross figure a Missouri
brooder house from 1 to 1:40.
Came home and got Mrs. Nord’s
roosters and went out there and
picked 65 hens out of 300 for a breeding
pen.
Got back in town at 6:30 and arranged
for a seed loan committee meeting
tomorrow.
Worked on seed loans, wrote two
business letters and to bed.
Total miles, 8.
Farmer inquiries, 3.

Saturday, February 14.

Wrote crop loans from 9 a. m. until
4 p.m. and then held a meeting of the
local committee until 7 p. m.
Attended a party after 8 p. m., got
there late.
Total miles, 4.
Farmer inquiries, 31.

Sunday, February 15.

One farmer here before breakfast for
a crop loan.
Culled Lynn Cameron’s chickens and
helped him pick out a breeding pen.
Wrote two business letters after sup-
per.
Total miles, 10.
Farmer inquiries, 2.

Monday, February 16.

School as usual.
Two applications for crop loans dur-
ing the noon hour.
Gentleman to Jim Nicholas’s store and signed him up for cow butter.

Conference with Mr. Hallibert about trip to Jefferson City for tax reduction.

Worked on lesson plans after supper but retired rather early.

Total miles, 18.

Farmer inquiries, 5.

Tuesday, February 17.

Three crop loans today.

Signed up Oscar and Sienceville for cow butter.

Visited project of Mark Wilson.

John Gross came about dark and talked project. Just as supper was ready Mr. Evans came to talk cattle and stayed until midnight.

Total miles, 18.

Farmer inquiries, 9.

Wednesday, February 18 and Thursday, February 19.

Started to Jefferson City at 6 a.m. and spent the day in interest of tax reduction.

Left Jefferson City at midnight and got home in time to eat breakfast and go to school.

Went to Summerville for a Farmers, Mothers and Sons banquet.

Got home at 1:30 a.m.

Total miles, 272.

Friday, February 20.

School as usual.

Crop loans until 5 p.m.

Booked all the game at 7:30.

Crop loans after the game ball until 11 p.m.

(The nice thing about the federal crop loans is the fact that it gives me a chance to introduce improved seed and the proper kind of fertilizer—and can discuss time and legumes.)

Saturday, February 21.

Crop loans from 9:30 a.m. until 7 p.m. without time for dinner.

(At one time there were over 20 farmers waiting to see me.)

Checked crop loans after supper until 10:30.

Farmer inquiries, 45 estimated.

Sunday, February 22.

Started to W. L. Cloose to call chickens, couldn’t cross the highway so went on to Ben Holton’s and called 106 hens.

Stopped at Elmer Ward’s regarding his loan, on the way back.

Graded advanced class notebooks Sunday afternoon.

Wrote five business letters Sunday night.

Total miles, 16.

Farmer inquiries, 10.

Monday, February 23.

Built on two Missouri type brooder houses at school today.

Held a conference with Mrs. James regarding the agricultural play.

Wrote two seed loans during the noon hour.

Went to Davis Stark’s at 3 p.m. for a sick cow.

Worked on crop loans after supper getting them ready for the committee tomorrow.

Total miles, 11.

Farmer inquiries, 7.

Tuesday, February 24.

Dictated 12 letters to a stenographer during the afternoon.

Wrote a seed loan at noon.

Went to Davis Stark’s at 3 p.m. to look over cow.

Worked on lesson plans after supper.

Total miles, 11.

Farmer inquiries, 4.

Wednesday, February 25.

In Summerville to an all day farmers’ meeting there. (1 talked on the 1931 poultry outlook and related poultry problems.)

Got a supply of seed blankets from Summerville and filled in three of these after supper.

Total miles, 88.

Farmer inquiries, 1.

Thursday, February 26.

School as usual.

Two crop loans in the noon hour and until 5:30 in the afternoon.

Dictated two letters after supper.

Transferred nine crop loans to the yellow paper.

Farmer inquiries, 3.

Friday, February 27.

Worked on crop loans during the noon hour and until 5:30 in the afternoon.

Arranged for a committee meeting Monday.

After supper worked over crop loans until 10:30.

Answered one business letter and turned in.

Farmer inquiries, 40 estimated.

Co-operative Effort Among Agricultural Instructors

W. R. Crabill
Heraldon, Virginia

FOR many years it has been apparent that a real need exists for closer cooperation and assistance among vocational agricultural teachers, especially where departments are closely located.

The district supervisor of vocational agriculture has so many demands made upon him that it is utterly impossible for him to be present at every school fair, community day, etc., especially, Father and Son banquet, evening and part time classes and various other similar activities. It is hardly fair to ask the district supervisor to teach evening classes for instructors due to the fact of his multiplicity of duties, not being familiar with each community, not knowing the members who constitute the classes and not being familiar with community practices.

In view of the facts mentioned above, two instructors in Northern Virginia saw that they could materially assist each other in the major community activities, such as evening class instruction, judging at community fairs, talks at Father and Son banquets, and so on. This idea arose some two years ago between the instructors of Floris High School and the Manassas High School. These departments being located only 15 miles apart on hard surface road made conditions ideal for such co-operative effort to exist. During the fall of 1928 this experiment started in a small way by J. P. Pullen and H. H. Seal of Manassas and Floris High Schools, respectively. This idea was then expanded and expanded by J. P. Pullen and W. R. Crabill at High schools.

Ways assistance was rendered:

1. During summer months worked out annual plan together.

2. Worked out community objectives.

3. Visited projects.

4. Acted in capacity of official judge.
   (a) Community day.
   (b) Community fair.
   (c) Corn and grain show.

5. Attended each other in evening class instruction.

6. Talked at Father and Son banquet.

7. Talked at agricultural assembly.

8. Made farm tour to Beltsville together.

Benefits derived:

1. Interechange of ideas.

2. Acts as a stimulus in creating a concerted effort in promoting a well rounded department.

3. Assists in locating apparent weaknesses.


5. Promotes co-operative effort.

6. Means of securing better response from community.

7. Aids in selling and keeping sold the department.

8. Avoids the possibility of getting into a rut.

9. Develops new ideas.

This comparatively new experiment of co-operative effort resulted in a desire on the part of the F. F. V. members to carry this idea of co-operation into their clubs, and it has been shown in the following ways:

1. Outstanding members of each department were present at their Father and Son banquets and took an active part in their program.

2. By participating in the initiation ceremony of each chapter.

3. By aiding other chapter in conducting community fair and community day.

In summing up the value derived from the two departments we concluded that this is a most excellent device in promoting co-operative efforts among F. F. V. members, it promotes good feeling between departments, gives rise to leadership, offers opportunity for self expression and creates initiative on the part of the boy.

[Editor’s Note—County or district organizations of vocational teachers is an established policy in Missouri. Such co-operation has proved to be extremely effective.]

Some News

PROFESSOR G. A. Schmidt, head of the agricultural education department at Fort Collins, Colorado, and Special Editor for Supervised Practice, is again on leave for graduate study at Columbia University. His address is Bancroft Hall, West One Hundred Twenty-first Street, New York City.

Professor S. H. Durand, for many years in charge of agricultural education at Laramie, Wyoming, will be on leave of absence this year and taking graduate work at Harvard.

Professor G. J. Dippold of Missouri has returned to his work after a year’s leave at Cornell. He has completed all requirements for his degree and is now privileged to use the coveted letters Ph.D.
Future Farmers of America

Organization and Management of a Future Farmer Chapter

E. I. ROSENBERGER, Woodbine, Iowa

The first step in the organization of a Future Farmer chapter is to sell the idea, that is, the Future Farmer program, to the boys. To do this the instructor must first be convinced that the Future Farmer program is a worthwhile one.

The following are just a few of the benefits derived from a Future Farmer chapter:

Through a Future Farmer organization the agricultural teacher can place the management of many departmental activities in the hands of the students. This serves to motivate these activities.

The Future Farmer chapter serves as an excellent agency through which the instructor is able to advertise his department without appearing in the "spotlight."

The F. F. A. chapter is of great help in developing leadership, by giving the boys a chance to shoulder responsibility. In connection with this point I wish to quote a statement made by my superintendent to the president of the school board. "The Future Farmer organization is doing more to develop leadership than any other organization in our high school." The Woodbine high school has four very active organizations sponsoring extra-curricular activities.

Thru the Future Farmer chapter the instructor can utilize the play instinct in creating and maintaining interest in school work. Of course this play instinct must be definitely tied up with a worthwhile program of work as I will try to point out.

In selling the F. F. A. program to your boys take sufficient time to arouse in them the desire for a chapter. Don't start out to organize a chapter by simply saying, "Well boys we are going to organize a Future Farmer chapter."

When the desire for a chapter reaches a point where the boys demand action toward organizing, then appoint a committee to work out a yearly program and a committee to make a study of the F. F. A. organization which is found in the national manual. A study of what some of the Iowa chapters have done will help in planning a program of work.

Following this preliminary work a meeting should be called for the purpose of electing officers, adopting a constitution, program of work, etc. Then have the officers hold an executive meeting to discuss what standing committees should be created. The president may appoint these committees. His appointments should be subject to the approval of the executive committee. In organizing the Woodbine chapter last year the following committees were appointed:

- Constitution committee
- Corn and Grain Show committee
- Publicity committee
- Finance committee
- Community Demonstration committee

Program committee.

Coming back to the idea of utilizing the play instinct I believe too many of us dismiss the play idea with the thought that we already have too much play in our high schools. I believe the chief thing wrong with our high school recreation is not that we have too much but that we do not have the right kind or do not have our play tied up with a worthwhile program. A program having proper balance is essential! "All work and no play makes Jack a dull boy." On the other hand all play and no work makes Jack a worthless boy. Somewhere in between these two extremes will be found the ideal combination.

Planning a worthwhile program of work seems to be one of the most difficult problems of managing a Future Farmer chapter. I am going to outline briefly some of the points handled by the Woodbine Future Farmers in working out their program of work. These points are far from ideal but will serve as a working base for new chapters.

The program committee consisting of three members worked out a skeleton program for each of the twelve monthly meetings. No two programs were alike. The details of each monthly program were worked out by a different committee, for example, a Parent-Son banquet was scheduled for March. The committee which worked out the annual program of work named a refreshment committee and an entertainment committee for each month. The March committee handled all the details for the banquet. These committees were named in the yearly program booklet published by the boys. This gives the boys plenty of time to prepare all arrangements for the monthly meetings. In case a boy named on a certain committee cannot serve it is his duty to trade with a boy who can be present, then later serve for the boy who took his place.

As regular monthly meetings 90 minutes are used for recreation, 30 minutes for business and educational features, and 50 minutes for refreshments.

The following items are included in the Woodbine chapter program of work:

1. Hold box and gift sale.
2. Parent-Son banquet.
3. Project tour.
4. Give community program and hold box supper.
5. Purchase purchased gilt and rent her out for a project.
7. Conduct potato, landscape and terracing demonstrations.
8. Camping out trip.

The following Don'ts may be helpful in organizing and managing a Future Farmer chapter:

1. Don't underestimate your students' ability to shoulder responsibility.
2. Don't fail to have both short time and long time objectives in your program of work.
3. Short time objectives that the members may soon experience the thrill of successful completion.
4. Long time objectives to hold the interest of the group over from one year to the next.
5. Don't assume the leadership of the chapter. That is the officers' job.
6. Don't fail to enlist the support of the parents in boosting the F. F. A. chapter.
7. Don't map out too large a program at first. It is better to add a feature or two later than fail to complete work started.
8. Don't leave your superintendent out of the F. F. A. affairs.
9. Don't grab the credit for the success of the F. F. A. activities. Let the F. F. A. members enjoy the praise.
10. Don't criticize the members too sharply for their failures. There is usually another time.
11. Don't fail to boost the other high school organizations. This boosting usually pays big dividends.

Agricultural Education October 1931
Future Farmers in New York
Write Young Farmers
in Germany

LOCAL chapters of Future Farmers of America in New York are deriving a great deal of satisfaction and pleasure by their correspondence with young farmers' organizations in Germany. During the summer of 1931, Mr. Everett Gibbs, a supervisory officer in education for the German government, before Dr. Brandt returned to Germany it was agreed that he would send the names of officers of young farmers' organizations in his country. Upon arrival, these names and addresses were forwarded to a selected list of secretaries of local Future Farmer groups. Several letters have been exchanged by the young men with the development of some real friendships. The exchange of photographs and special reference to local, state and national problems in agriculture have proved especially helpful, in developing this new and wholesome relationship across the Atlantic.

Following the annual meeting of the Association of Young Farmers in August of the present year excerpts of these letters will be prepared and made ready for publication in this magazine.

October 1931 Agricultural Education
A PRactical agricultural education and a thousand dollars at graduation, is the slogan that has hung in the front of the agriculture room at the Madison, Ohio, high school since 1924. David Dunlap was one of the first boys in the state to make this amount of money in project work. David lives on a 30-acre farm. As he did not have the money to buy chicks his freshman and sophomore years, he took advantage of a financing plan offered by a hatchery.

David is working at home this year but hopes to start to the agricultural college next year where he intends to specialize in poultry.

First Year:

1½ acre celery
Labor income $ 91.15
500 chickens
Labor income 111.15

 Second Year:

250 pullets
Labor income 705.08
500 chickens
Remodeled part of barn for poultry

Third Year:

220 pullets
1,500 chickens
Labor income $1005.28

Fourth Year (1926-27):

670 pullets
3,100 chickens
Labor income $2346.47

Built new laying house and brooder house
Total labor income 4 years $4349.

The school is the steering gear of a democratic society. Whatever is put into the school program of any generation will come out in the social program of the next generation.—Ross L. Finney.

"The man who knows how in life is usually a success, but the man who knows why is usually his boss."—Tony’s Scrapbook.

Send new stories and other F. F. A. copy to Professor H. O. Sampson, College of Agriculture, New Brunswick, New Jersey.

Methods actually used. These things not only tell us whether the farmer in question is using approved practices, but by observing the financial income per year and the return per $100 of feed fed to hogs, he will also see how successful these practices have been in raising the farm income.

With each different livestock enterprise, of course, it is necessary to modify the procedure to some degree. Thus with the dairy the pounds of butterfat per cow will replace the pounds of pork per litter, and with poultry it will be the eggs per hen. But the general principles will be the same. In any case the method must be sufficiently thorough not only to show the financial success of the enterprise considered as an integral part of the farm, but must also show, or at least suggest, which practices need to be changed in order to improve the returns.

The final step is to examine the use of labor, power and equipment. Here we must consider whether the power and equipment outfits are adapted to the farm in question, and if not how much it may be feasible, under the present financial situation to change them.

The measures we will use here include such figures as the number of acres in crops handled per man, the acres of crops handled per horse, the value of feed per acres for the tractor per acre of crops, the equipment cost per crop acre, and so forth.

If a certain change in equipment seems desirable, we need to consider not only how many additional acres of crops it will enable the farmer to handle, but also whether profitable use can be made of any labor saved, and what the change is going to cost.

Finally, having examined all important aspects of the farm business, the next step is to make use of the information we have obtained. This calls for more or less revision in the farm budget for the next year to avoid errors of the past and exploit the advantages we have uncovered.

In general it may be said that this method of dealing with farm records is intended to be as clear as possible. The purpose is not merely to keep records but to obtain desired information on specific problems connected with the profitable management of the farm. Second, the records must be tied in with the practical operation of the farm, and third, effort should be wasted in obtaining data which have no practical bearing. In the third place the method of analysis must deal with the entire farm as the unit and not with disconnected fragments of it. This consideration is followed, paradoxical as it may sound, even to the analysis of the individual enterprises. The question is not, for instance, whether the dairy is satisfactory merely as a dairy but rather whether it fits in well with the farm business as a whole. The real problem is how the enterprise may be made to contribute as much as it is capable of doing to the net income of the entire farm.

The eternal triangle in vocational agriculture—the boy, his dad, the teacher.