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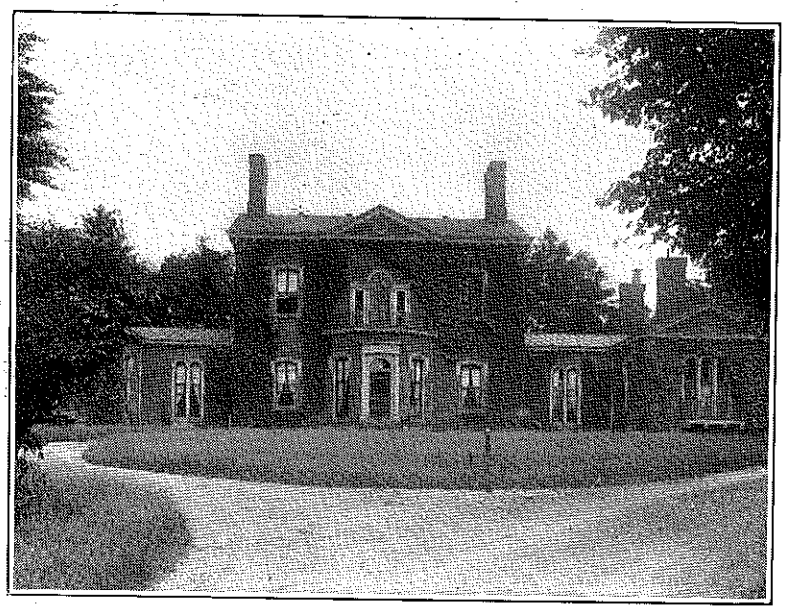

Farm Home of an Illustrious Farmer

Ashland, Lexington, Kentucky, the farm home of Henry Clay

[*See editorial page*]

"Conclusions may be accepted merely because the suggestions are vivid and interesting, while a large accumulation of dependable data may fail to suggest a proper conclusion because of opposition from existing customs."—John Dewey

EDITORIAL COMMENT

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THE FARM HOME OF HENRY CLAY

THE farm home aspect of the life of Kentucky's most illustrious son has received little attention from those who have sought to render tribute to his immortal name. Information concerning Henry Clay as a farmer has been very meager. Yet he ranked high in this branch of activity. An intimate friend of Clay was once asked: "How did Mr. Clay (He was always known as Mr. Clay.) rank among the farmers of his neighborhood?" He received this reply: "Oh none ranked higher—except his wife. Mrs. Clay successfully administered the affairs of the farm and home when Mr. Clay was away on political duties.

Kentucky must credit Virginia with having produced the boy, Henry. There he spent his early life in a section of the state known as the "Slashes" because it was poor, marshy land largely overgrown with bushes. His parents were poor, and his father died when Henry was only four years old. He assisted his mother in the duties of the small farm which was their home. "Now the barefooted boy might be seen plowing; now mounted on a pony guided by a rope bridle, with a bag of meal thrown across the horse's back," he might be seen going home from mill on the Pamunky River. The people nicknamed him the "Millboy of the Slashes."

Mr. Clay purchased his Kentucky farm home, at Lexington, in 1805 or 1806 and later wrote: "I am in one respect better off than Moses. He died in sight of and without reaching the Promised Land. I occupy as good a farm as any he would have found had he reached it, and Ashland has been acquired not by hereditary descent but by my own labor." We see, then, that he did not inherit an ancestral estate, but that a love for such an estate prompted him to invest his first earnings in a farm home.

When bought by Mr. Clay, Ashland was unbroken forest land, and the price paid for the original tract was probably about $10 per acre. At the time of his death (1852) the estate contained between five hundred and six hundred acres. Here, about 1809 he erected a handsome, brick dwelling. The sight of the house is a slight elevation, sloping gently toward the highway. These slopes are a rich sward of blue grass and are unsurpassed in beauty. In the rear of the dwelling are the virgin forest trees of ash, whence the name Ashland. It is said that around the house were planted at least one tree of each kind native to Kentucky.

While much of the house has been rebuilt, it is almost the exact counterpart of the original structure. The numerous gables and chimney-tops are delightfully suggestive of that hospitality for which Ashland has ever been renowned. The writer of this editorial found that hospitality today when he visited Ashland and asked the great-granddaughter of Henry Clay, Mrs. Thomas S. Bullock, if he might secure a photograph of the house, to use as our magazine cover. The original arrangements in the house are preserved as in the time of Mr. Clay. Still can be seen the "cabins," the ice-houses, and the barn.

Mr. and Mrs. Clay spent many years and much effort in beautifying the grounds of Ashland. The shady walks, the arrangement of the shrubbery and trees indicate the preference of its illustrious master. With its winding, shady avenues, its tall hemlocks, ashes, and walnuts, whose branches lap overhead, and here and there the flowering or ornamental shrubs, the unique house set back among them and covered with vines, the whole place was pervaded with charm that still lingers to greet the pilgrim who goes to bask for a season among the hallowed scenes of the beloved Clay.

Many times Mr. Clay retired from public service in the hope of remaining on the farm and devoting himself to its interests. Especially did he look forward to the fulfilment of this desire when he returned from Washington at the close of Adam's administration in 1829. His home at Ashland and the peaceful pursuits of rural life were full of delights for him. April 19, 1830, he wrote from Ashland to a friend: "I assure you most sincerely that I feel myself more and more weaned from public affairs. My attachment to rural occupation every day acquires more strength, and if it continues to increase another year as it has in the last, I shall be fully prepared to renounce forever the strifes of public life. My farm is in fine order, and my preparations for the crop of the present year are in advance of all my neighbors. *I shall make a better farmer than a statesman.* And I find in the business of cultivation, gardening, grazing, and the rearing of various descriptions of domestic animals, the most agreeable resources."

However, he was re-elected to the Senate in 1831.

May 30, 1833, he wrote: I have been principally occupied with the operations of my farm, which have more and more interest for me.——I have the maltese ass, the Arabian horse, the Merino and Saxe Merino sheep, the English Hereford and Durham cattle, the goat, the mule, and the hog. The progress of these animals from their infancy to maturity presents a constantly varying subject of interest, and I never go out of my house without meeting some of them to engage agreeably my attention."

Clay was especially interested in the production of livestock. He was concerned in the first large importation of cattle to Kentucky, at the close of the War of 1812. He took many prizes on his cattle and horses, also on his Merino sheep. He himself was an excellent judge of all kinds of livestock.

Though interested in livestock, Clay was not indifferent to other branches of agriculture. He took great interest in horticulture, trying many experiments. He was fond of flowers and often assisted Mrs. Clay in her flower garden, just in the rear of the lawn. Today we find in the garden remnants of their efforts in the sweet old-fashioned flowers still blooming there. The walks are laid out as they were when Mrs. Clay walked among her roses and daffodils.

He was particularly interested in methods of building up the soil. He grew and knew much about various crops. It is said that he wrote a pamphlet on the culture of hemp, then an important crop in Kentucky.

Had not his ability and powers so inevitably called him into the larger field of public service, it is easy to decide with Clay that he had found in farming the "vocation best suited to his capacity." His home people think of him as Henry Clay—farmer of Ashland, patriot and statesman, and unrivaled orator of the age.—C. H.

A. V. A. PROGRAM

THE program for the Agricultural Education Section of the American Vocational Association meeting which is to be held in Detroit, December 7, 8, 9, 1933, is practically complete.

Special emphasis is to be placed upon Farm Management teaching, both for day school and adult groups. National land policies and national agricultural credit programs will be interpreted by some of the outstanding leaders of the nation. How all of this affects the teaching of vocational agriculture will be the final theme of the meeting.

Methods

Some Specific Things I Will Do to Help My Pupils Think Well

W. F. STEWART, Professor of Agricultural Education, Ohio State University

W. F. Stewart

PERHAPS the reason why so few of us do our own thinking is that the schools never seriously attempted to teach us to think for ourselves. Perhaps the reason why so many of us are blind followers is that we have been trained to be blind followers. Effective thinking is the most important factor in successful living. All teaching that does not stimulate real and careful thinking makes for stupidity. It may be the stupidity that in later life shows itself in obstinate prejudice."

Those are challenging words that Boraas gives in his *Teaching to Think.* But mere words and preaching and theories do not bring relief. At best, they merely point out the need, the causes, and, occasionally, ways and means as cures. Relief can come only when you and I, teachers in service, really do those things which will prevent the undesirable effects of teaching which are under the teacher's control. We need to *do* things. "Things to do" are called techniques. So, for myself, I have formulated some things to do, or some techniques to encourage good thinking. I am presenting them with illustrations supplied by my students from their classroom experiences. From these specific activities and their application in the classroom, I am hoping that many teachers of vocational agriculture may gain suggestions that will help them to make definite progress in the fine art of teaching their pupils to think well.

Techniques to Make Clear Problem-Solving Procedures

In attempting to acquaint pupils with the procedures in solving problems, it must be emphasized that the problems must be carefully selected. They must score high according to the accepted standards of a good problem.

1. I will acquaint my pupils with the pattern solution of a forked-road problem.

Problem: Deciding upon the variety of potatoes that a certain boy shall plant as his project.

For purpose of brevity, only steps in solving this problem are given. For my own students I have developed the technique in an article entitled "Some Thoughts About Thinking."

Steps in solving this type of problem.

a. State the problem clearly and definitely.

b. Recall or find out the factors having a bearing upon the problem.

c. Recall or find out the facts related to each factor.

d. Evaluate the factors by recognizing their relative importance in the situation under consideration.

e. Make your decision.

(A very important element in this teaching procedure is that the factors and facts used in solving a real problem are recorded on the blackboard.)

2. I will acquaint my pupils with the pattern solution of a problem of the type: Given an effect, to find the cause.

Problem: What is the cause of loss in Fred's chickens?

For brevity, the steps in the use of the blackboard in explaining this pattern solution are omitted: also in 3 and 4, following.

3. I will acquaint my pupils with the pattern solution of a problem of the type: Making a generalization.

Problem: Here are a dozen hens, some layers and some non-layers.

What are the characteristics of the laying hens?

4. I will acquaint my pupils with the solution of a creative problem.

Problem: How would you rearrange the fields of your home farm if you were given that responsibility?

5. I will encourage analytical thinking by asking my pupils to attempt to state the procedure they believe will aid in solving a proposed problem.

Teacher: Frank has asked us to help him decide what fertilizers he should use in growing his project of an acre of potatoes in the field he has rented from his father. What are some of the factors Frank should consider in making this decision?

Ted: The present fertility of the field.

Roy: The demands of the potato crop for plant food.

Ralph: The kinds of fertilizers available.

Ray: The results which successful potato growers have secured.

Paul: The cost of fertilizers.

Teacher: A very good analysis. As you search for facts on this problem, you may find three or four additional factors you will want to consider.

6. I will help my pupils to find information when needed, rather than to assign references for every lesson.

Teacher: We now have our problem clearly in mind, and we have several suggestions of things we will want to know. Naturally, our next step is to find reliable information which we can use in making our decision. Of the reference sources which you have used in solving problems, which do you think may be helpful now?

Tom: Henry and Morrison's *Feeds and Feeding.*

Dick: Smith's *Pork Production.*

Harry: Anderson's *Swine Enterprise.*

Charles: Plumb's *Study of Farm Animals.*

Teacher: Very good for a beginning at least. What will you use as "key words" in the indexes of these references?

Thomas: Rations for brood sows, also Brood sow management.

Dick: Rations.

Allen: Feeds, proteins, carbohydrates, and the like.

William: Feeding practices.

Teacher: Very well, let's take the reference books and look for information, using the key words you have suggested. No doubt, others will occur to you. I shall record the references on the blackboard as you report them.

Tom: "Brood sow management," Henry and Morrison, pages 354-356.

Charles: "Feeding the brood sow," Plumb, page 423.

Harry: "Rations for pregnant sows." Anderson, pages 180-182.

Teacher: I suggest that you look up "supplemental feeds" and "protein supplements" as other key words.

Harry: Here is a whole chapter on supplemental feeds in Anderson, pages 247-272.

Tom: Henry and Morrison, pages 364-369.

Teacher: What have you boys found who have been going through our bulletin index and file?

Ray: "Sow and Litter Demonstrations," Ohio Extension Service Bulletin.

Frank: "Money in Hogs," Tennessee Extension Bulletin.

Fred: Here's a good one,—"Pork Production in Ohio," Ohio Extension Bulletin, also "Swine Feeding," another Ohio Extension Bulletin.

Earl: "Feeding the Brood Sow," Iowa Experiment Station Circular.

Teacher: From my own files I have the summary of our ton-litter production records, including the rations fed, which I think will be of interest. What information will we need from our home farms?

Tom: I think we should all report the rations which we feed at home.

Teacher: Very well. Let each calculate on the basis of a 100-pound mixture the ration you usually feed your brood sows.

It has taken you boys 10 or 12 minutes to find these sources of material. I could have found them in advance and have told you. Of what bene-

our lives.

William: This makes us less dependent upon the teacher in solving our problems.

Charles: It deepens our thinking by making us consider at once just how we will solve the problem and just what information we will need. I think that when you give us the references, we are apt to read them just for their information without thinking very much about the problem we are to solve.

Teacher: Very good answers. I might say that sometimes we shall probably use one method and sometimes another, but the important thing is that each of you shall develop the ability to find your own references.

7. I will make clear to my pupils the more common mental activities such as guess, memory, reasoning, judgment, and creative thinking.

Teacher: Frank, how many grains in a bushel of wheat?

Frank: I hardly know. I'll say 50,000.

Teacher: How many pounds in a bushel of wheat?

Frank: Sixty pounds.

Teacher: Now, all of you notice that Frank used two different mental activities. The first we call a guess, and the second recall, or rote memory. In making his guess, Frank had *very few* or *no facts* to use in arriving at his answer. In the answer from memory, he had merely to *recall a fact* once learned. Now let us go further. John, what will you receive for 64 eggs when they are selling at 30 cents a dozen?

John: $1.60.

Teacher: Now this one: Who in the class is the best dressed today?

John: Well, that's pretty hard to say, but I will vote for Bill.

Teacher: How many of you agree with John in his answer on the returns from his eggs? (All agree.)

Teacher: How many of you agree with John as to the best dressed boy in our class today? (Nine agree, and six disagree.)

Teacher: These answers illustrate roughly another difference in mental activities. In the first case John arrived at his answer by reasoning. In reasoning he had to *recall* and *use* facts. but the facts had *the same meaning* for all of you. Therefore, all of you, by using them correctly, reached the same answer. Had one of you answered $2, the others could have pointed out your error. But in the case of the best dressed boy, you see it was different. You had to *recall* and *use facts*, it is true, as in reasoning, but the *interpretation* of those facts was *not* necessarily *the same*, and as a result you did not reach the same answer. It may be, one likes one color or pattern better than another, and therefore you differ in your judgments as to which boy is the best dressed, but none of you can prove your choice correct, can you? So it is in selecting livestock and in buying a suit and in scores of similar situations, you may arrive at an answer different from that of another, due to the difference in your evaluation of the facts.

Mathematics and in applying scientific principles, the resulting answers are always the same, or, if not, an error can be pointed out and corrected because everybody interprets or evaluates the facts in the same way. Let us keep in mind these differences between reasoning and judgment. In a few days we shall discuss creative thinking,—sometimes referred to as "the crowning glory of mental effort."

Now, as a help in distinguishing these terms,—guess, memory, reasoning, judgment, and creative thinking,—I suggest you make a stair of five steps and on the lowest step write "guess" and on the others, in turn, "memory," "reasoning," "judgment," and "creative thinking." Let us think about these terms and try to understand them better.

Techniques to Promote Understanding

8. I will point out the relationship of cause and effect to real understanding.

John: The egg production began to increase after I started to use lights, because the hens had a longer day, and in the longer day they could eat more. Eating more food resulted in more material for egg making, and this, in turn, produced more eggs which is what I wanted.

Teacher: That's well stated, John. It is a good thing to know that lights increase egg production, but do you not see that it is knowing the cause and effect chain that really makes you understand?

9. I will ask my pupils to cite the use of this relationship when used by themselves or others.

John: The pigs were stunted because he raised them in the old hog lot, and they became infested with worms. The worms used the nourishment in the food, produced a toxic condition, and caused stoppage of the intestines. As a result, the pigs were unable to get enough nourishment for their needs, so they became stunted.

Teacher: Does John's answer show clear understanding, Paul?

Paul: Yes, because he brought out the chain of cause and effect relationships we talked about yesterday, and did not stop with just saying, "The pigs were stunted when fed in the old lot."

10. I will try to develop an ideal in my pupils of "always telling why" when giving answers.

Teacher: What variety of wheat would you grow on your farm, George?

George: Trumbull.

Teacher: (Waits for George to continue but he misses the cue.) Let us form the habit of always telling why we believe as we do. What are your reasons for preferring Trumbull wheat, George?

George proceeds to give his reasons.

Second Illustration:

Teacher: How would thinning affect the shape of the apples, Fred?

Fred: It would make them larger. (Pause).

Teacher: If you were in my place, how would you rate Fred's answer, Jim?

Jim: I wouldn't rate it very high. He knows whether it was just a guess or whether he really knows. Unless he can tell why, he probably doesn't understand.

11. I will help my pupils to develop the ability to think out carefully their answers to thought questions.

Teacher: Just what is the relationship of the topography of the land to whether Charles should fall plow or spring plow? Now, before I ask any of you to give your answer, let us think just what a good answer to this question shall include. State the suggestions that come to your mind, and I will write them on the blackboard.

Fred: An answer should tell about hilly lands washing badly when fall plowed.

Bill: It should tell that the soil on lands that overflow will also be carried away when fall plowed.

Ed: It makes no difference with well-drained level lands.

Carl: Land subject to back-water will settle and need to be replowed in the spring any way.

Teacher: Very good. What techniques which we already use should be applied in giving this technical information?

Fred: We should build the cause and effect chain as long as possible in each case.

Teacher: Now will each of you consider the order in which you will present the information suggested. It need not necessarily be the same in all cases, but it should be based upon some relationship or order.

Ed: I think a good arrangement would be to discuss topography with reference to fall plowing, then with reference to spring plowing, and then apply the information to Charles' problem.

Teacher: That's one very good arrangement. Another suggestion?

Fred: I should think that the arrangement might consider fall plowing versus spring plowing with reference to each point mentioned.

Teacher: That is what we call thought relationships by contrast, isn't it? Now, let us ask different ones to discuss the question involving the facts mentioned and any others that may occur to you. Use the arrangement you believe will be most effective. We will give John the first opportunity.

(John proceeds to answer the question.)

Teacher: John, that's the kind of an answer that does the teacher's heart good. What an improvement you showed over the incomplete answers so often given! Will all of you not try to profit from our procedure, and, in later questions, take time to think through your answer to include the important facts with their reasons and all stated in good arrangement.

12. I will ask my pupils to account for differences in decisions, changes of mind, and wrong decisions. I will build these answers, from day to day, into an accumulative list.

George: I would rather have Trumbull wheat because it yields the best.

John: It doesn't either. Our bulletin says Gladden yields more.

Teacher: Would you rather have Gladden than Trumbull, John?

John: Yes, because our bulletin shows that it yields 2 bushels per acre more than Trumbull.

Henry: That's right, but I would rather have Trumbull any way because I would not grow a bearded wheat.

John: Gladden is not bearded, is it?

Henry: Yes, it is. Isn't it, fellows?

Teacher: Yes, Gladden is bearded all right. Would that make any difference in your decision, John?

John: I would rather have a smooth wheat when the yields are so nearly alike.

Teacher: Why didn't John choose Trumbull in the first place?

George: He didn't know Gladden has beards.

Teacher: Is this lack of knowledge of facts the cause of wrong decisions very often?

Henry: Yes. With me it is the most important cause. I would not have studied Latin last year if I had known what kind of a study it is.

Teacher: Let us start a list entitled "Some Causes of Wrong Decisions" and use this for the first one. (Lists on the board: 1. Lack of knowledge.) As we find other causes later we shall add to the list, and then we will try to avoid them in making future decisions. It will be easier to dodge trouble if you know where it is found, won't it?

Another illustration

Teacher: What is your decision today, James, on drilling or checking corn?

James: I am still in favor of drilling corn because you can secure larger yields.

Teacher: Have you any proof for that, James?

James: No, but you have more plants, and that will give you a larger yield.

Teacher: What is wrong with James' reasoning?

Bill: He has evaluated the facts wrong. A larger number of stalks does not necessarily mean a larger yield. Often it means a smaller yield.

Teacher: Let us list as Number 2 "Wrong evaluation of facts" in our list of "Some Causes of Wrong Decisions."

13. After the class has developed this list, I will hang our framed chart "Some Causes of Wrong Decisions" on the classroom wall.

Teacher: We have now listed several causes of wrong decisions that you have discovered in our class discussions. I wish to show you a chart entitled "Some Causes of Wrong Decisions" which has been prepared by the Department of Agricultural Education and is given to our department on condition that we frame it, hang it up in our classroom, and refer to it occasionally in connection with our discussions. How many causes are listed on the chart?

Pupils: Ten.

Teacher: How many have we discovered in our discussions?

Pupils: Eight.

Teacher: How many have we discovered not listed in the chart?

Pupils: One.

Teacher: Where shall we hang this chart? Let us use it to check our thinking each day. If we find additional causes, we shall add them to the list. Better thinking will come from studying the causes of our mistakes and trying hard to eliminate them.

14. In later discussions I will frequently ask my pupils for the causes of differences or of changes in their opinions.

Teacher: Last Friday we had a list of factors on the board which must be considered in deciding whether to fall-plow or to spring-plow. I believe several of you decided that fall-plowing is a good practice on your home farms. This morning, in looking over Albert's project book, I read that he plans to plow his corn ground in the spring. Apparently he has changed his mind. Why did you change your mind, Albert?

Albert: I want to get all the green manure I can from the sweet clover. Therefore, I will let it grow until late April or May. Also because sweet clover would come up in the corn if fall-plowed.

Teacher: Let's look at our chart. Which cause explains your case, Albert?

Albert: Numbers 2 and 3, "Wrong evaluation of facts" and "Failure to use known facts."

Teacher: Yes. But I am pleased to notice that you boys are making fewer wrong decisions than you did earlier in the year.

15. I will encourage my pupils to question the data used by others and to demand the best data available.

Ray: I don't believe it is best to use certified seed potatoes. We used them two years ago, and last year we used common seed and we couldn't see any difference.

Teacher: What do you say to that, Henry?

Henry: You can't tell that way. The two seasons were different, and probably he had them on different fields, and fertilized differently, and many other things would affect the results. You should have everything the same but the seed. Our Experiment Station says certified seed from dependable growers is the best, and I believe they test it out better than a farmer can.

Teacher: Which is the better evidence in this case, personal experience or the Experiment Station results?

John: I believe the Experiment Station is the best. It is the business of those people to try out all available seed and to determine the best.

16. I will ask my pupils to anticipate situations at a time when more factors or facts related to the problem may be known by them and relate this to a willingness to change their decision.

Teacher: You have decided to recommend Fulhio wheat to the farmers in this community because it yields high, has good milling qualities, is beardless, resists winter killing and smut, and does not shatter easily. Do you suppose that several years from now when later classes study farm crops, they will necessarily decide on Fulhio?

Arnold: No. Just as Fulhio has been recommended for our locality only the last few years so, no doubt, within a few more years other improved varieties will be developed, and new facts will be disclosed that will make another variety more profitable.

Teacher: That's very true. Let us be on the lookout for new information, and be willing to change our minds if the new facts seem to justify a change.

Techniques to Improve the Quality of Thinking

17. In development lessons I will make use of questions of evaluation (judgment) where such judgments are believed feasible.

Teacher: We have discussed the requirements for seed corn storage. The boys are asked to list the specific storage places and devices used by farmers in the community and to rate each,—very good, medium or poor,—on its meeting each of these requirements. Each rating will be discussed with consideration given to the quality of judgment used.

18. If differences of opinion seem to prevail after a full discussion and evaluation, I will make clear the recognition of points of difference, encourage further thinking and be content with differences thus understood rather than to insist on the "right" decision,—i.e., my decision.

John: I still don't believe in cooperative marketing even tho the majority of the class do. I can see all of your arguments but they do not seem to counter-balance mine.

Teacher: We have discussed the advantages and disadvantages of cooperative marketing. They are listed on the board. Each group sees the arguments of the other group. I am not so much interested in having both sides agree as I am in having you see the whole problem and try to evaluate the factors fairly. We have learned that, in many judgment situations, people do not agree even though they have the same facts. When your decisions are based upon your honest consideration of the facts, even differences in decisions can be tolerated without serious concern about the future. It is when individuals refuse to recognize facts that dangerous decisions are made.

19. I will test the factual knowledge of my pupils first by asking questions that call for the uses or applications of facts rather than merely a statement of the facts.

Teacher: Copper sulphate, as you know, comes in crystals or powder, and may be easily sprinkled over the feed of sheep. Would you approve of such a practice in controlling worms in sheep?

Sam: No. While it would be easier to do, the sheep might not get the right amount, especially since sick sheep do not eat much, and they are the ones that need the treatment the worst.

John: Yes, and besides all solids go to the paunch. The worms are in the true stomach. If the sheep ate enough to kill the worms, by the time it reaches the true stomach it would kill the sheep. The better procedure would be to apply the copper sulphate in a solution and give each sheep a measured dose by drenching the sheep.

20. I will commend good thinking or progress attained in thinking well.

Teacher: Did you notice the improvement in the recitation John just made over the incomplete answers he made early in the year? It was very much better, John. It shows you are learning to break problems up in a systematic way, a procedure which is so necessary in solving difficult problems in life.

(Continued on page 56)

Filing Bulletins and Charts

ROY OLNEY, West Virginia University

Roy Olney

ONE of the most important jobs of the teacher of vocational agriculture is to keep himself, his pupils, and his evening class members abreast with new farm practices and facts. The most direct and accurate source of these are found in bulletins issued by experiment stations. Also, teachers are making use of much charted data in both all-day and evening classes.

Therefore, it is important that adequate storage space should be provided, and the bulletins and charts should be classified by some simple method, in order to make the best use of them.

The West Virginia Bulletin and Chart Cabinet and method of filing now in use by teachers of vocational agriculture in the state meets the requirements that should be considered in the choice of any system for filing bulletins and charts. These requirements are as follows:

1. Simple method of adding new bulletins and charts to the file as they are received by the teacher.
   a. The classification key given below makes it possible to number quickly the bulletins and charts, and place them in the cabinet.
   b. No individual index cards are used for classifying the bulletins.
2. Easy access to bulletins and charts.
   a. Bulletins all on same level, at convenient height, and well grouped by dividing cards (See Figures 1 and 2.)
   b. All charts are placed flat on shelves, and available by opening two doors.
3. Elimination of bulletins' being misplaced when returned to the file.
   a. The classification number given each bulletin and chart directs it to the proper place in the file.
4. Provision for duplicate copies of the same bulletin. (See dividing card No. 4 in Figure No. 1.)
5. Provide simple plan for culling out old bulletins and charts.
6. Provide for adding varying numbers of bulletins and charts, without disorganizing system of filing.
7. Reasonable cost of storage equipment. (The cabinet can be made in the farm shop.)
8. Storage equipment movable.

> From time to time this magazine publishes an article on filing teaching materials. Surely, every teacher of vocational agriculture should use some good filing system. Filing reference materials is inexcusable. The materials cost the taxpayer too much money not to be used efficiently. Not to be able to find what one has is worse than not having it.—Editor.

BULLETINS

Plan for Classifying Bulletins

The most logical system of classifying and filing bulletins is on the farm enterprise basis.

The following divisions and sub-divisions are suggested for the classification of bulletins for a typical farming locality and can be condensed or expanded to meet any local conditions.

Figure 2. Cabinet complete. Bulletins are filed at convenient height, and charts easily accessible

Figure 1. A separate dividing card with title is provided for each group of duplicate copies

1. ANIMAL HUSBANDRY
   General
   1.1 Beef cattle, general
   1.11 Breeds
   1.12 Feeding
   1.13 Management
   * * *
   1.2 Dairy cattle, general
   1.21 Breeds
   1.22 Feeding
   1.23 Management
   * * *
   1.3 Feeds and feeding, general
   1.31 Commercial feeds
   1.32 Concentrates
   1.33 Mineral mixtures
   1.34 Pastures
   1.35 Roughages
   1.36 Succulent feeds
   * * *
   1.4 Horses and mules, general
   1.41 Breeds
   1.42 Feeding
   1.43 Management
   1.44 Selecting
   * * *
   1.5 Meats, general
   1.51 Cutting and curing
   1.52 Hides
   1.6 Sheep, general
   1.61 Breeds
   1.62 Feeding
   1.63 Management
   * * *
   1.7 Swine, general
   1.71 Breeds
   1.72 Feeding
   1.73 Management

2. BEES
   General
   2.1 Diseases
   2.2 Equipment and supplies
   2.3 Management

3. DAIRY INDUSTRY
   General
   3.1 Butter making
   3.2 Marketing
   3.3 Milk and cream

4. FARM ENGINEERING
   General
   4.1 Construction
   4.2 Machinery
   4.3 Repair work

5. FARM MANAGEMENT
   General
   5.1 Accounting
   5.2 Cooperation
   5.3 Marketing
   5.4 Organization

6. FARM STRUCTURES
   General
   6.1 Building materials
   6.2 Farm barns
   6.3 Farm houses
   6.4 Silos and tanks

7. FIELD CROPS
   General
   7.1 Barley
   7.2 Buckwheat
   7.3 Corn
   7.4 Hay
   7.5 Legumes
   7.6 Oats
   7.7 Pastures
   7.8 Potatoes
   7.9 Weeds
   7.10 Wheat

8. FORESTRY

9. HORTICULTURE
   General
   9.1 Apples
   9.2 Berries
   9.3 Cherries
   9.4 Garden
   9.5 Grapes
   9.6 Peaches
   9.7 Pears
   9.8 Truck crops
   9.9 Landscape gardening

10. INSECTS AND DISEASES
    General
    10.1 Animal husbandry
    10.2 Crops
    10.3 Orchard

11. POULTRY
    General
    11.1 Breeds
    11.2 Brooding
    11.3 Culling
    11.4 Diseases and pests
    11.5 Feeding
    11.6 Housing
    11.7 Management
    11.8 Marketing

12. SOILS AND FERTILIZERS
    General
    12.1 Drainage
    12.2 Soils
    12.3 Fertilizers

13. VETERINARY
    General
    13.1 Disinfectants
    13.2 Remedics
    13.3 Wounds

14. MISCELLANEOUS

Dividing Cards for Bulletins

There are three series of main dividing cards for grouping single copies of bulletins in the cabinet. The material for the cards should be of heavy grade press board with the top corners rounded, since it will need to stand considerable wear.

The method of labelling the dividing cards is shown in Figure 1.

The number of such cards will be determined by the supply of bulletins. Dividing cards should not be put in for only four or five bulletins, as the cards will occupy too much space in the file, and the headings will be difficult to read when the cards are too close together. Where there are only a few bulletins on an enterprise, they should be filed after the main division card until a sufficient supply has accumulated to justify making a separate subdividing card for the topic. Bulletins of a general nature that can not be readily classified under the three divisions of headings should be placed back of the divdiing card marked "General."

Where duplicate copies of bulletins are secured in sets of ten or more for class use, it will be necessary to have a fourth series of dividing cards, one card for each set of bulletins. The title for this card should be typed on gummed paper or cloth and placed at the top of the card. The label should contain title and number of the bulletin, date, and name of institution publishing the bulletin. All sets of duplicate copies would be filed back of the single copies of the enterprise concerned, in alphabetical order. The dividing cards for duplicate copies should not contain filing numbers, as they would be confusing in filing the single copies.

Numbering Bulletins

All bulletins should first be grouped under one of the fourteen headings in the classification list, and then grouped into one of the sub-divisions. Each bulletin should be marked with a number of two or more digits, as, 1.72 or 7.8. The whole number designates the main division group, and the decimal the subdivision group or enterprise and job concerned. For example, the above numbers would be placed on the following type of bulletin—1.72, Animal Husbandry, dealing with Swine on the job of Feeding: and 7.8—Field Crops bulletin dealing with Potatoes. Bulletins so marked would then be placed in the file back of the dividing card, already marked with the corresponding number. By using the above numbering system on the bulletin, we classify each bulletin once according to its title and contents, and then it becomes necessary to give attention only to the number in replacing the bulletin to the proper place in the file.

The bulletins should be numbered in the upper right hand corner.

Duplicate copies of the same bulletin are given the same number.

CHARTS

Plan for Classifying Charts

The lower part of the West Virginia Cabinet may be divided into eight chart

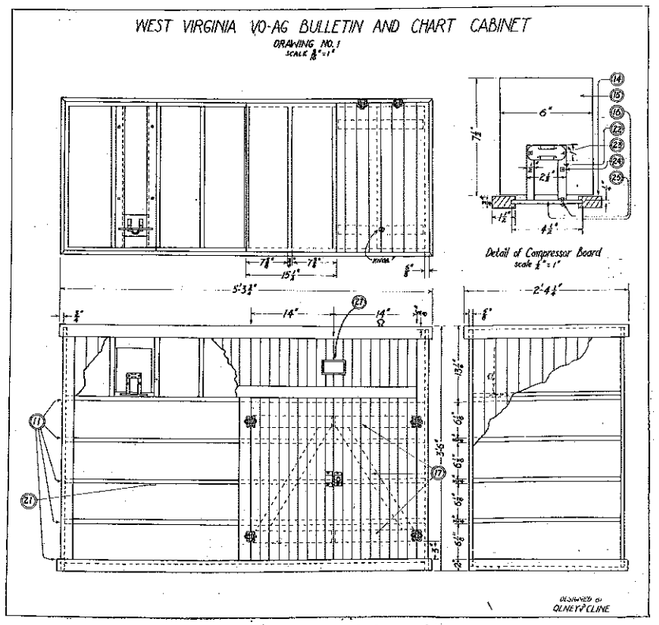


Figure 3. Bulletin and chart cabinet

following headings are suggestive for classifying the charts:

Compartment
Number — Heading

1—Animal Husbandry (including dairying).
2—Field Crops (including soils and fertilizers).
3—Farm Management and Marketing.
4—Farm Structures, Machinery, and Shop.
5—Horticulture.
6—Poultry.
7—Department Records and Summaries.
8—Miscellaneous.

Cataloging and Filing Charts

The following plan is suggested for filing charts. Use eight manila folders with the headings above written on them. These folders are placed in the file with other teaching materials. This is the most convenient place because the list can be referred to at the time the teacher secures analysis and teaching plans for any teaching unit from the file. Each folder would contain a number of sheets of heavy 8½ x 11 inch paper with a farm enterprise or division of the main heading written on each sheet in the upper, left-hand corner. (The plan for classifying bulletins will be suggestive for topics for these sheets.) These sheets will be placed in the folders in alphabetical order. The charts on any given enterprise or topic will be listed on the page in alphabetical order, according to farm job or topic, giving number of chart, title, source, and date issued. Where there are only a few charts on an enterprise, they may be listed in the order in which they were secured, and arranged in alphabetical order later when the volume makes such a re-arrangement necessary.

A number of two series, as 2-1, will be assigned to each chart and will appear before its title on the list in the folder and also on the chart, in the lower right hand corner. The first number in the series designates the compartment in the chart cabinet where the chart is located, and the second number designates the chart's position in the compartment. For example, the chart numbered 2-1 would be the first chart (on bottom of pack) in compartment 2 (Field Crops). When adding a new chart to a compartment, the last number in the series for the chart will be determined by the number of the last chart filed in the compartment. No attempt should be made to keep charts grouped according to enterprise or jobs in the compartments. They should be filed according to numerical order only.

KEEPING BULLETINS AND CHARTS UP-TO-DATE

Keeping an adequate supply of the better bulletins and charts should be a constant activity of the agriculture teacher. Therefore, the teacher should have some criteria to guide him in determing what bulletins and charts are of enough value to have a place in the file. The following criteria are suggested for use in evaluating bulletins and charts:

1—What is the title of the bulletin?
  a—Is the problem of any importance in the community?
  b—Is it a technical bulletin?
2—Is content up-to-date?
  a—Date published?
3—Where published?
  a—Does it apply to local conditions?
4—Is the subject matter accurate?
  a—Are adequate experimental data cited?
5—Does the content set up improved farm practices?
  a—Does it tell specifically how to do the practices?
6—Can the contents be interpreted by high school boys?
  a—Is it well organized?
  b—Is it well written?
  c—Is it well illustrated?

Criteria for Evaluating a Chart

1—Contents:
  a—Does it suit local conditions?
  b—Are data reliable?
  c—Is it easily interpreted?
2—Mechanical make up of the chart:
  a—Are data well arranged?
  b—Are data shown graphically?
  c—Is it easy to read?
    (1) Letters large enough?
    (2) Well spaced?
  d—Does it have too much material on it?

Note:—Working drawings, bill of material, and detailed directions for construction of cabinet are available on request to the writer.

An Inexpensive Weed Mount

W. N. PARMETER, Instructor,
Geddes, South Dakota

IN August 1932 at the South Dakota state conference of vocational agriculture men, the subject of mounting weeds was one of the topics for discussion.

Most of the departments in the state seemed to have difficulty in finding an inexpensive mount case that would stand a lot of usage. Several ideas were presented but were not just what the department needed for some reason or other.

Since attending this conference, I have worked out various types of mount cases, and think I have found one that will answer the need of any agriculture department. It is inexpensive, durable, and can be made in the shop by the boys.

I will explain the construction of this mount case, first giving a list of materials.

Materials for eighteen 5 x 9 inch weed or head sample mount cases:

2 pounds of sheet tin gauge	$0.20
3 window panes 10 x 28 inches	1.05
Cardboard cut 5 x 9 inches (used material)	
1 roll of cotton	.15
18 used bottle caps (no charge)	
Total cost	$1.40

Procedure:

The tin is bought in 28-inch lengths, cut in flat strips 13-16 of an inch wide. The edges of the tin are bent in, forming a trough. Each side is 3-16 of an inch high, and the bottom 7-16 of an inch wide. Then 45-degree angle notches are cut in the sides at intervals of 9, 5, and 9 inches. The 9-inch intervals make the side of the mount case, while the 5-inch intervals make the end when bent in a rectangular form. A glass forms the face, and a 5 x 9 piece of cardboard forms the back of the case, while the head sample mount and the bottle cap rest in a layer of cotton between the front and back. The notches are cut to form the corners without over-lapping the tin.

The glass is cut from a standard window pane 10 x 28 inches, first cutting it in half lengthways (5 x 28) then cutting 3 nine-inch pieces out of each half.

Any heavy used cardboard will do for the backs.

A thin piece of cotton is put on the cardboard, the sample is put in place, a piece of root is placed along one side, and a bottle cap with some seed of the mounted specimen is also placed in the cotton. The glass is then put on top, and all of them slid into the tin frame.

The used bottle caps can be obtained from any confectionery. They are ground off on an emery wheel to fit the glass front closely enough so the seed will remain in place.

After the mount is in place, the end can be bent around and soldered.

Some Specific Things I Will Do to Help My Pupils Think Well

(Continued from page 53)

21. In blackboard work I will make a practice of listing the number for the next fact or factor, in addition to those given, as an indication of openmindedness.

Teacher: We have listed nine advantages of raising alfalfa. If we thought longer about it, we would probably think of one more, so because of that, we will put No. 10 here. This shows we recognize the incompleteness of our knowledge on this subject.

Thus the techniques may be presented, and the effects indicated, may be obtained. These techniques will suggest others. Likewise, the illustrations of their application will suggest others, doubtless better ones. Surely there is not a class period that passes but that a teacher can find opportunities to apply one or more of these techniques. As a daily reminder it is suggested that a typed list of all the techniques that can be appropriately used shall be kept on the desk of every teacher who proposes to do these things. A few minutes of application, whether planned or impromptu, here and there in each lesson, every day of the year through the four years of high school teaching,—what an influence for better thinking on the part of our pupils! The end seems most worthy, because we believe that "all teaching that does not stimulate real and careful thinking makes for stupidity."

The nature of mind being what it is, we must see that it is more important to train it to meet new situations than to store it with ideas and rules that may be outgrown in a decade.

Supervised Practice

Planning Supervised Farm Practice

EDMUND C. MAGILL, Department of Agricultural Education, Virginia Polytechnic Institute

Edmund C. Magill

SUPERVISED farm practice has been a weak spot in vocational agriculture. We will have to confess we have talked and written glibly about supervised farm practice on the one hand and then have gone supremely on teaching *informational* agriculture to groups of students. Little wonder that the individual student has been unable to make the necessary applications to his own program; that so little improved farming experience has resulted; and that the content of instruction and the farming programs of individual students have looked so unalike. The following was a department mimeograph, practically unchanged from the way it was written almost three years ago. It represented the thinking of a small group of cooperating teachers of agriculture, supervisory and teacher-training staffs in Virginia when they planned to insure that instruction be devoted to planning farm programs of individual students. What was agreed upon has become practice in the state.

I. The Purpose of Planning

Many aims or purposes might be used for justifying plans and planning by a vocational student in agriculture. The real purpose of planning is to promote learning through proficiency in the student's farming. Good planning seems to promote success in the boy's farming and tends to fix attitudes and habits as to what constitutes good farming. Every instructor should keep before him the following fundamental aims, in order that plans shall be purposeful and useful for each individual boy. What are the purposes, then, in planning in the farm business of the student?

(1) To teach the boy to *forsee* probable conditions and problems and be prepared for them.

(2) To provide a definite scheme for teaching the boy to study and *analyze* a situation.

(3) To teach a boy to recognize and *evaluate improved farm practices.*

(4) To enable the boy to *determine the possibilities for profit* in farm enterprises.

(5) To make more certain of the boy's *following out the supervised farm practice* scheme satisfactorily.

(6) To enable instruction to be more seriously directed toward the boy's own farming situation and his individual needs, and thereby further escape from informational agriculture.

II Standards in Planning

Standards are similar to the specifications for a building—specifications purposing to satisfy accepted building principles as applied to that particular building. When the standards are met, good planning has been done. Those standards are only tentative, but they are never-the-less standards for the present. An instructor who desires to have good plans should see to it that the following standards are met by his students in planning *all* their supervised farm practice.

(1) There must be a definite objective for the whole farming program of the boy. This might well go beyond the two, three, or four years of his high school enrollment.

(2) There must be a definite objective for each farm enterprise and for supplementary farm practice, in terms of the farming program.

(3) There must be a statement clearly justifying the objective set-up for the farming program, enterprises, and supplementary farm practice. (The statement may be educational in justifiying the objective as well as in terms of the type of farming the student has selected and in terms of efficiency in farming.)

(4) There must be a definite statement as to the nature and scope of the supervised practice program and for each enterprise and supplementary practice.

(5) There must be a careful calculation of costs and returns for each enterprise and supplementary farm practice.

(6) The specifications ("set-up" or proposed procedure) in the plan for conducting the enterprise shall be as follows:

a. Every job to be performed shall appear in a list.
b. Only those jobs will be planned where the practice is to be changed from what the boy is accustomed to on his home farm. (None of the purposes justifies writing out practice that the boy would have followed and when he knows the reason for such practice.)
c. Only that practice shall be specified for which there is a reasonable possibility of being carried out. (There is no justification for putting into the plans some improved practice that cannot be followed—silly but often done. This does not relieve the boy nor the instructor of doing their utmost in getting *any* practice carried out in the most efficient way.)
d. Specifications for any job shall be specific and cover what, when, where, and how as applied to the individual needs.
e. The "why" (that is, explanations and reasons) is not to be included in the plan but shall be found in the boy's note book or work book.

(7) There shall be standards of efficiency for each enterprise carefully established annually by the boy, which if attained in a normal year would represent proficient farming. (Standards shall include at least cash and net returns per unit of production.)

(8) All plans shall be written with pen and ink neatly, simply, and legibly.

III Procedure to be Followed in Insuring Good Planning

(1) The instructor should teach the job "Selceting the Type of Farming I Will Train For." The application step for this lesson will be the selection by each student and the justification for it. When satisfactory for the individual student, it should be copied into the record book.

(2) The instructor should teach "Selecting the Enterprise and Supplementary Farm Practice Which Will Fit into My Type of Farming," In the same way the application step will be carried out and, when satifsactory, copied into the record book. This will be done annually. Objectives and the nature and scope of the enterprises and of supplementary practice will be established not only for the year but tentatively for the future, and when satisfactory will be copied into the record book along with a statement justifying them.

(3) The instructor should teach some lesson such as "What Standards Should Be Set For My Farming?", and as a result of this each student should set definite and worthy standards for his own program for the year. These should then be written into the record book.

(4) Vocational students should then be allowed to work in groups to analyze each enterprise represented in the class, and when satisfactory the analysis should be copied into the record book. Each student will then indicate by an asterisk the jobs in which he is not proficient, after conference with the instructor. These are to be planned in detail. As the farm jobs are taught in the classroom, it may be found that others must be planned.

(5) Arbitrary values will be set for each job or practice, and these entered in pencil on the scoring device in use. Thus, a perfect program might be 1,000 points with 200 allotted to corn and 40 alloted to five corn jobs.

(6) A lesson should be taught on planning supervised farm practice, including :

plan.

(7) Whenever a job or practice is taught in the classroom, each student shall make application to his own supervised farm practice program (or else to his home farm). When it is known that the boy has good prospects for carrying out the improved farm practice in his own farming program as planned, including approval by the parents when advisable, it should be copied into the record book.

(8) Plans shall include all managerial jobs and such operative jobs as involve new or changed practice compared with what the boy *himself* is accustomed to. These would be indicated by an asterisk in his list of farm jobs for any enterprise in his farm program.

(9) The detail in planning shall be sufficient to insure a correct and full understanding by the boy and the instructor as to just how the job is to be performed, even if several months should intervene.

(10) Note books shall be kept by the boys on an enterprise basis, with division sheets of different color between enterprises or with thumb marks labeled with the name of the enterprise. Notes for each job shall begin on a new page. They shall be brief, specific, and organized so as to be easily used by the boy.

Project Visiting Calendar

MILES MEREDITH, Instructor in Vocational Agriculture, Tompkinsville, Kentucky

IT IS generally agreed by leaders in agricultural education that project visits without a purpose are worth very little and may even do harm. Too frequently we teachers of agriculture have visited the boy's project when it was convenient for us to make the visit, irrespective of the kind of project or the important jobs of the project as related to seasonal sequence. Much time, energy, and expense may be saved by having a definite plan for visiting projects. The plan should cover the important jobs of the project. These jobs should be placed on a seasonal basis.

Jobs in the Farm Practice Program of the Tompkinsville High School

Student's name is placed here	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Burn plant bed (V)	Secure and sow seed	Spread manure	Break ground	**BURLEY TOBACCO** Apply nitrate of soda to bed (CC)	Set plants (V)	Start Cultivating Spray with lead arsenate	Top (V) Cut and house (V)	Select ground (V)	Strip and grade (D) (V)	Market (C)	
	Care of pregnant ewes (C)		Get lambing quarters ready (V) Care of ewes at lambing time (CC) Prepare lamb creeps (C) Mix lamb ration Dock and castrate (V)		**SHEEP** Drench ewes for stomach worms (V)	Market lambs	Change pasture of ewes	Select and get ewes (V)	Flush ewes (CC) Breed	Method of financing Get house ready for winter (CC)	Mix winter ration	

(V) VISIT
(D) DEMONSTRATE IN CLASS
(C) REMIND THE STUDENT
(CC) INSIST THAT THE JOB BE DONE ALTHO MAY NOT MAKE A VISIT

Visualizing the Project Program

W. C. LETH, Newberg, Oregon

FIFTY boys enrolled in vocational agriculture in Newberg Union High School, Oregon, are busy with their projects for the coming year and have their plans nearly completed for their operations. [Written January 1.]

Perhaps the best way to appreciate the total amount of project work undertaken by these boys is to consider it as all joined into a single farm. If this could be possible, it would make a farm of 331 acres, with 166 head of livestock and 978 head of poultry. There would be 86 acres of dent corn, 26 acres of wheat, 13 acres of barley, 29½ acres of oats, 1 acre of peas, 32 acres of red clover, 32¼ acres of oats and vetch, 9¾ acres of potatoes, 2½ acres of melons, 1 acre of tomatoes, ¼ acres of cabbage, 1 acre of beets, ½ acre of rutabagas, 1 acre of truck crops, 3 acres of strawberries, 16¼ acres of blackcaps, 1 acre of loganberries, and 68½ acres of pasture.

There would be 20 dairy cows, 18 heifers, 4 calves, 21 sows, 7 boars, 13 gilts, 69 barrows, 14 sheep, 567 hens, 300 baby chicks, 24 ducks, 6 geese, 66 turkey hens, and 15 stands of bees.

The average project for each boy would consist of 6.6 acres of crops, 3.3 head of livestock, and 20 head of poultry. Each student would have 3¾ enterprises.

Over the state as a whole, students do not average over two enterprises, and in this respect the Newberg Future Farmers have ranked the highest in the past few years. It means that each student is getting experience in several kinds of production.

Of course, the advanced students carry larger projects than the beginning students for they have had more chance to increase the size of their projects.

If the value of all the livestock could be determined, it is likely that the investment of the boys would amount to over $4,000. Most livestock and seed used by the boys is of high quality, and selected because of its production.

Getting Started in Long-Time or Continuation Projects

C. H. VAN VLACK, Instructor, Audubon, Iowa

IF OUR vocational agriculture is to be truly vocational in the sense of building for farming, and is to be based on the project method, the projects used should provide not only the individual teaching set-up for the particular year the student is enrolled in school, but it should help that individual get started in the farming business.

In all probability, too many of us are so filled with the idea that our one big job is to conduct a "class in agriculture" that we think or plan little farther. The supervised practice is too often confined to one project per year. Could not this one project be a piece of the principal enterprise on the boy's home farm, or even if not yet established on his own farm, an important and growing farming enterprise in the community?

In starting and directing a farm boy on a long-time program of farm practice, the teacher should at the outset spend time with the boy and his parents in trying to determine what particular enterprise appeals most to the boy and which will furnish the greatest satisfaction in view of his likings, tendencies, and opportunities. No doubt there is a great advantage gained if the boy can be helped to make an early decision as to the kind of farming he should be studying.

What shall guide us in helping the boy to make a well-planned start in this long-time farming venture? Surely if the boy is very fond of livestock and some line in particular, we should see that this interest is fostered if equipment and opportunity are at hand, and local farming trends and marketing facilities justify the practice. In all probability, after this livestock project is under way, a feeling of need for feed crops will manifest itself, then easily and naturally interest can be cultivated in other projects to supplement and round out the long-time program of farm practice which will eventually carry the student into the farming business at the close of his formal school days. [Be careful about getting animals before thinking of the feed—Ed.]

It is almost needless to say that other tendencies or interests of the boy could be handled in a similar way with their corresponding accompanying feelings of need for supplementing practices.

While from most angles it is very desirable that we should help the boy to make early decisions as to the kind or kinds of farming he is to especially prepare for, we should be careful that hasty and ill-formed plans are not made. The student should be made familiar with general local farm situations and possibilities, and what other and older high school boys are doing, by visiting and studying their projects.

If the teacher will make proper observations and interpretations in these first weeks and months with the boy, then check them against the wishes and advice of the parents, he should be able to render the boy a real service in the way of getting a start in a vocational education program (and academic, too) which looms big along with that of the classroom.

Putting Over A Good Project Program

G. A. SCHMIDT, Teacher Trainer in Agriculture, Colorado Agricultural College

UNDOUBTEDLY those teachers of vocational agriculture who give much class time in helping boys to engage efficiently in the various activities involved in the supervised farm projects, are putting over a good project training program.

There are many distinct and specific activities which all project workers must engage in. To give ample class time to such activities is the best type of teaching that can be done in vocational agriculture. The following list of project activities can effectively be made class teaching units:

1. Developing supervised practice programs.
2. Setting up definite objectives for projects.
3. Formulating preliminary plans for projects.
4. Making satisfactory business arrangements for projects.
5. Making the project budget.
6. Making a list of the major jobs occurring in projects.
7. Making detailed plans for the major jobs occurring in projects.
8. Making and using a project inventory.
9. Determining the project records to keep.
10. Keeping project labor records.
11. Keeping project expense records.
12. Keeping project income records.
13. Keeping other necessary project records.
14. Making a financial summary of a project.
15. Analyzing the project story.
16. Writing the project story.

This list of activities was made the basis of the teaching in a subject called "Administration and Supervision of Home Projects" last summer at the University of Wyoming, taught by Mr. R. B. Jeppson, State Supervisor of Vocational Agriculture of the State of Nevada.

A teaching layout is here presented as suggestive for teaching unit 2, Setting up definite objectives for projects.

Teaching Layout on the Job

Job: *Setting Up Definite Objectives for Projects*

Situations to be dealt with:

1. Most successful farmers and business men as a rule set up some definite things to accomplish.
2. Many farmers do not have any definite measures of accomplishment.
3. Boys have had little or no experience in setting up objectives.
4. Better work will result through the setting up of objectives.

Objectives:

1. To get boys to see the need and value of setting up definite objectives.
2. To have each boy make a list of worthwhile objectives of accomplishment for his project work.

Devices:

I. *Preparation:*
- A. Cite case of boy shooting at ducks or a target and possible scores to be made.
- B. Show need for aiming directly at bull's eye in order to make the best possible record.

II. *Presentation:*
- A. Classroom discussion led by teacher to draw up possible objectives for project work.
  1. Yield per acre, cost per pound, returns per hour, etc.

III. *Application:*
- A. Work out aims and objectives for some farm enterprise.
- B. Use one which is not likely to be selected as a project.
- C. Through individual instruction, have each boy make a list of the aims and objectives for his projects.
  1. Example: Turkey enterprise.
     Keep cost per pound below 16 cents.
     Raise 14 poults for every head of breeding stock.
     Raise 80 per cent of poults purchased.
     Spend not more than 1.5 hours per bird.
     Make a labor income of at least 40 cents per hour. Etc.
- D. Have each boy copy this in project record book.

IV. *Testing:*
- A. Check boy's plan to see that he has included definite worthwhile aims and objectives.
- B. Frequently check aims and objectives with practices being followed.
- C. At close of project, determine to what extent the boy has attained his aims and objectives.

A School Project in Puerto Rico

THE land was thoroughly cleaned up. We then started planting the temporary shade, bananas. Using 2,040 rhizomes, properly selected, cleaned, and fertilized, we planted them in straight rows, 8 x 8 feet. Part of this seed was bought; the rest was donated by farmers of the community. After planting all rhizomes, we continued plowing the land in order to plant a cover crop of velvet beans. In May and June we expect to plant the permanent shade, Guaba and Guama, at the left of each banana rhizome. These shade seedlings have been offered to us by some farmers, and we will plant them as soon as the rainy season begins. The coffee will be planted next year when we have sufficient shade from the bananas. We have a coffee nursery, planted by the boys, which will supply the necessary seedlings.

Alfalfa

A check made among the boys in the agriculture classes revealed less than twenty acres of alfalfa being grown on their farms at home, yet dairying is our leading enterprise here. In order to promote an alfalfa enterprise I went to our local milk company and discussed with them a plan of growing more alfalfa among the boys. The board of directors of the milk company readily agreed to furnish enough seed to plant 1 acre to each boy who would join the group. Each boy was required to sign a contract in which he agreed to test his soil before seeding and to lime if necessary. He was also to carry out the project under my supervision. Sixteen boys were enrolled. Fields were tested and mapped, and the seed was sown this spring. Grimm alfalfa seed amounting to $60 was furnished by the milk company. In practically every case a good stand has been obtained. We expect to have a tour of these projects and we will invite the directors of the milk company to go along.—O. C. Holt, Amboy—The Fan Mill, Illinois.

Farm Mechanics

The Farm Mechanics Survey as a Basis for a Reorganized Shop Course

M. K. LUTHER, Graduate Student, Oregon State College, Corvallis

THE average farm mechanics teacher has done a fairly good job of teaching the shop portion of the vocational agriculture course. Due to a number of features the course has often received favorable comment from the parents and students. In these two points—a fair teaching job and the favorable reception of the work—lie some of the reasons for the complacency that has caused even the better teachers to overlook some of the very evident weaknesses found in the farm shop courses throughout the country.

This will no doubt be interpreted as a severe criticism without basis by many men in the field, but special studies of our teaching problems and experience as a farm mechanics teacher make it clear to the writer that it is doubtful if any of us can truthfully say we have overcome many of the faults expressed in these forthcoming points:

1. There has been a failure to set up a yearly program of jobs in advance. Most men have a yearly program of subject matter. That is, they have indicated when and for how many weeks they teach harness repair, farm machinery, woodworking, and so on. It is not a yearly program of jobs, as it does not indicate that there are three sets of harness at Mr. Brown's farm, or four cultivators already spoken for on which to do repairing, on four other designated farms. In other words, it does not indicate the jobs to be selected and brought in, or the organization of these jobs in a teaching sequence. This lack of a yearly program of jobs is the most serious criticism, and is evidenced by or results in:
   a. Too much training on a few skills given a boy, while he may receive little training on other skills equally important.
   b. Some jobs are better than other similar jobs for giving effective training. There is not this selection of jobs. The jobs rule the teacher, for he usually takes what he can get as long as it is "practical."
   c. Through one reason or another the teacher often fails to get to the teaching of some of the desirable skills he has set out to teach at the start of the year.
2. There has been a failure to integrate or tie up the shop work with the boy's supervised practice and his home farm.
3. There has been a failure to do away with artificiality as shown by:
   a. Use of "practice" or pseudo jobs when these are not needed or justified.
   b. Giving the boys any jobs, just to provide "busy work" and to keep them out of mischief. Busy hands may not be busy brains.
   c. Exploitation.
   d. Jobs not actually farm jobs. Even with all the surveys on this we are still turning out bird baths and chair legs.
   e. Working on jobs or operations not in their proper setting. The skills are not taught in their proper coordination. Not all the skills or abilities needed in learning to cut a rafter are learned until the work is done for an actual building.
4. Jobs are often done in a chance sequence or because of a work need only. Both the working order and the proper teaching order should be considered and integrated.

These four points are a formidable list of weaknesses. However, we have been making excuses for these weaknesses instead of putting our minds and efforts to devising a means of building up a yearly program that will overcome these faults so evident in even many of the better taught shop programs.

A large portion of the school year 1932-33 was given over to the study of the needs here involved, and much work was done with a group of boys in attempting to set up a method of reorganizing the shop work to eliminate some of its weaknesses. The following procedures and recommendations for building a course from the farm mechanics survey are the result of this study and research.

There are four essential steps in using the boy's home farm as a basis for the content and organization of farm mechanics. These are listed here with the hope that some of the men in the field will give it, or a similar program, a fair trial:

1. A farm mechanics survey should be made of the farms of each of the ninth grade agriculture boys. This could be made during the late summer preceding their entrance in school, or soon after school opens. This survey should include all common possible repair and construction jobs which the farmer wants done, or thinks will be needed, during the coming two or three years. Besides the column on the survey sheets containing all the equipment on which repair or construction work is to be had, there should be provisions for (1) inventory of large equipment, (2) indicating whether the job is construction or repair, or purchase, and (3) a generous space for "remarks." There should be a survey for each boy's farm, and the boy's name must be at the top of each page of each survey. Without this survey the remainder of the program is worthless.

The advantages to the entire program of vocational agriculture that accrue from this one step alone are of sufficient importance to justify the time (¾ to 1½ hours on each farm) and effort put to this part of the reorganization program. Space does not permit them here, but actually taking a survey will make them evident.

2. The results of all these individual surveys must now be summarized onto some convenient, readily accessible chart, called for convenience a "Job Chart". This job chart should list all the jobs found, in a vertical column on the left of the sheet, together with the frequency (number of times found). The boys' names should be so arranged across the top that the jobs can be checked against these names. Later, as many of these jobs are completed, the teacher may use this chart in checking the jobs as having been completed, thus giving to the job chart the added purpose of a completion or grading sheet. The job chart is a result of the extensive survey, and essential if accuracy and convenience are to be elements of the work necessary to building a yearly program.

3. Before the instructor can wisely select from the chart effective teaching jobs, he must know what skills and abilities are the basic needs of the boys. He will want to make himself a "skill sheet", easily done as nearly any of the textbooks will indicate the skills and abilities basic in farm carpentry, soldering, forge work, and so on. Any teacher having been on the job for more than a year or two may be surprised to find that he can make up a very good skill sheet for all the work in the full farm mechanics course right out of his head. The basic skills and abilities may be listed in a vertical column on the left of the sheet, and, if desired, this skill sheet may be made another means of checking the boys on the skills or abilities learned, by having their names across the top as on the job chart.

This skill sheet becomes of much use when the instructor wants to decide on which skills and abilities he wants to teach the ninth grade boys, the tenth grade boys, and so on, as a basis for the yearly program of jobs for each class.

4. With all the jobs listed that are to be had from all the farms represented in the class, and all the skills arranged conveniently, it is a comparatively simple matter to build up a yearly program for this ninth grade group. This program can, and should, show which jobs these boys should work on during the year, which skills and abilities these jobs will give practice in, and approximately when jobs can be worked on.

To make this yearly program, the teacher will first select these skills suitable for the ninth grade boy as suggested in number 3 above, and secondly he will select from the job chart such jobs as he feels will teach the skills he has in mind, and which can be brought into the shop, or which he can get out to. He may wish to carry this yearly program further and designate which jobs each boy will probably work on during the year. Since he knows each repair and construction job, he should be able to organize the work on difficulty levels more than ever before.

For the second, third, and fourth-year classes, the procedure is similar. However, the original survey will have too many changes in it after the first year to serve further without some checking up. It is suggested that during the project visits in late summer the teacher go over the survey with each father and boy, making additions, corrections, and other changes, to bring the survey up to date. This accumulative survey is probably as essential as the original.

A more lengthy discussion of these steps in building a yearly program would bring out how a close tie-up with the project program and the shop work might be had, and how the problems connected with farm mechanics projects and doing shop jobs at home are made less difficult.

This procedure gives an advance yearly program based on jobs and not on subject matter outlines. The fact that there are limitations and difficulties to such a comprehensive program does not weaken it. It is true the details of the program will probably not always work out as planned, and the teacher must be constantly adapting and reorganizng as he finds that a farmer has already done this job, or has found he cannot afford to do that one. It will not eliminate the need for much hard work by the shop instructor. The best that can be hoped for is that it may do away with complacency and the "taking a chance" attitude of which we have had too much. The aim of the entire program is to insure a well-rounded set of skills and abilities for the boy, that he may have the needed proficiency in repair and construction jobs.

A careful analysis of such a program will make evident these general advantages of organizing the shop program around the jobs found on the farms of the boys:

1. It will be a basis for building a definite course of study on actual jobs available.
2. It should serve to eliminate inactivity, lack of interest due to working on similar jobs too much, and exploitation.
3. It should serve to cover a larger proportion of the desired skills important in farm repair and construction.
4. As it is possible to cover more skills, it follows that there will be more opportunity to study related information and to gain more direct knowedge.
5. It is a means of studying the direct relationships between the farm mechanics activities and the supervised practice program.
6. It gives opportunity for the selection of farm mechanics projects.
7. It allows for and suggests accumulative surveys which make possible a well set up program for each year.
8. There will be less excuse for artificial jobs. The teacher knows where the real jobs are, so it is up to him to make use of them.
9. The activities of the instructor incidental to taking the survey cannot help but be a stimulant for more effective work as a teacher, and it also serves to give the parent an understanding of this part of the program not possible before.

Home Projects in Farm Mechanics

S. S. SUTHERLAND, Supervisor, Agricultural Teacher Training, Davis, California

ABOUT a year ago farm mechanics teachers in California began to give serious consideration to this question, "If the home project is the valuable teaching device that it seems to be, why can't we use it in teaching farm mechanics?" An increasing number of schools in the state were changing to the hour period which curtailed the time given to shop work. Financial conditions on the farms were such that shop projects involving the purchase of much new material were increasingly difficult to secure, and teachers were experiencing difficulty in securing practical jobs for instruction in the school shop.

As a result, a number of schools experimented with home projects in farm mechanics, developed around the central idea of improving the equipment and buildings on the pupils' home farms, and doing the repair jobs that needed to be done and which the pupil had been trained to do in the school shop. A certain amount of shop time was set aside for planning these projects and for estimating the time and material needed for the work contemplated. In most cases these home projects were done entirely by the pupil at home under the supervision of the instructor, but in others the boy was assisted by his father.

Below is reproduced a record of the home project work of Charles Lafranconi, a freshman vocational agriculture pupil at Santa Rosa High School during the school year 1932-33. This program of supervised home practice is fairly typical of that carried on by pupils in this and other schools in the state this past year, although the number of hours of work actually done by the boy is somewhat lower than the average of the projects reported. A third-year pupil at the same school, whose home project, as well as that of Charles Lafranconi, was visited by the author, carried on a program of farm mechanics work at home involving 236 hours of his own labor and about $80 for material.

On seven other projects visited, representing five different schools, the average number of hours of pupil labor was well over the hundred mark, but these included the building of poultry and hog houses and other equipment used in their agriculture projects.

The work done by this boy, as shown

(Continued on page 64)

FARM MECHANICS PROJECT LABOR RECORD

Date	Job	Hours Self Labor	Cost of Material
Nov. 18	Painted top on car	½	.20
Nov. 19	Repaired side of barn	2	Old lumber
Nov. 21	Repaired corral fence	1½	Old lumber
Nov. 26	Put bench in shop and hung up wrenches	1½	.....
Dec. 9	Made four concrete steps to basement	3	$3.00
Dec. 11	Built concrete cooler	4	$2.20
Dec. 15	Built door for basement	1	.75
Dec. 21	Changed pipes from tank to cattle trough	4	Old pipe
Dec. 23	Repaired pipes from chicken house to brooder	4	Old pipe
Dec. 24	Took out pipes from windmill to cattle trough	5	
Dec. 26	Ground valves on Ford car	4	.20
Dec. 27	Put in new wiring on Ford	2	$1.45
Jan. 15	Changed brush in generator	½	.10
Feb. 25	Put new roosts in brooder house	8	$12.00
Mar. 11	Repaired fence	7	Old lumber
Mar. 19	Repaired generator	½	
Mar. 23	Repaired forge	1	
May 6	Repaired gas engine	2	$4.00
May 7	Put grease retainer in Ford wheel	½	.10
May 14	Put new bands in Ford	4	$1.65
May 23	Repaired buck rake	2	.40
May 24	Sorted and stored nails in shop	1	
May 28	Started painting shop	½	$1.65
May 29	Painted half of the shop, and sharpened tools	5	
May 30	Rearranged equipment in shop	1½	
May 31	Finished painting shop	2	
June 1	Hung tools and painted shadows	4	
	Totals	73	$27.70

Future Farmers of America

To all members of the Future Farmers of America:

AS PRESIDENT of the Future Farmers of America, I am issuing a call for the Sixth Annual National Convention of the organization to be held at the Baltimore Hotel in Kansas City, Missouri, November 17-24. As in former years, the Convention will be held in connection with the Eighth Annual National Congress of Vocational Agricultural Students which occurs at the time of the 1933 American Royal Livestock Show.

Each chartered state and territorial association of the F. F. A. in good standing with the national organization is entitled to two official delegates to the National Convention. May I ask that the officers of each state association make immediate plans to have delegate representations and urge as many F. F. A. boys and friends as possible to attend the Convention? Let's have a delegation from each of the 46 states and from Puerto Rico and Hawaii! With your willing cooperation, we will make this the biggest and best convention in the history of the F. F. A.

VERNON HOWELL
National President

The Part the F. F. A. May Play in Cotton Adjustment

Address by C. A. COBB, Cotton Production Administration, U. S. Department of Agriculture

FUTURE FARMERS OF AMERICA NATIONAL RADIO PROGRAM
Monday, August 14, 1933

Editor's Note: Read this address, to get the attitude of Mr. Cobb toward the F. F. A.

IT IS quite a common practice to address a group of young men as the men of tomorrow. In many cases that is quite proper, especially when speaking to small boys, but today I am not speaking to small boys. I am not speaking to the men of tomorrow either, I am speaking to the men of today who at the same time are the future farmers. Indeed, the better farmers of the future of America. I know you are men now, because of the very mature and very able assistance rendered during the present cotton reduction campaign. Much of the success of the campaign up to this stage has been due to your efforts. In this cotton campaign you and your teachers have rendered a service of inestimable value to the South and to the nation. It is a privilege to tell the whole nation of what you have done and to give you the credit you so richly deserve. You have played the part of men and are due a man's credit.

Now, I am glad you are an organized group, that you believe in and are organized for team work. It was team work of the highest order we have ever seen in agriculture that made the cotton campaign the overwhelming success it is. The leadership in agriculture has demonstrated in a most convincing way its power to do a tremendously big job in a big way. In many ways this cotton campaign has demonstrated to agriculture its power to deal effectively with the great problems that affect the farm. For that reason alone the campaign has been worth all it cost. It was the type of team work you men believe in that brought success and that has left those of doubtful minds wondering how it all happened.

In passing, let it be said that the present campaign for cotton reduction will be over when the last row of cotton contracted to the Government has been completely destroyed. Use your influence to see to it that not a single stalk of cotton is left standing on land contracted to the Government.

Beyond the present year and its strenuous effort to adjust production and get a fair price for cotton there is much work to be done by Future Farmers as well as all the rest of us. There is still too much cotton. The supply is still oppressive. It must be pulled down. You are needed to help with that job, and you are going to be greatly needed in laying the foundation for the most profitable type of cotton growing in the future.

The great need of the cotton producing industry calls for more pounds of better lint per acre. You Future Farmers are going to be called upon to produce and supply good planting seed and to lead the way in adopting the best methods of growing the crop. At this point we have great opportunity to increase the profit in cotton growing as well as abundant opportunity to hold our position of supremacy in the cotton-growing world.

There is a big job ahead for us all. I am glad to point to it. I am glad to call attention to the work yet to be done to make a clean job of the present campaign, and to thank and congratulate you for the splendid part the Future Farmers have played in bringing the campaign of the year to a successful conclusion.

Announcement of 1933 Song-Writing Contest for Future Farmers

THE Future Farmers of America has announced a song-writing contest with prizes totaling $150. This contest is conducted in order to secure appropriate songs characteristic of the organization, its ideals, and its purposes. *Competition is open to any one anywhere.*

It is suggested that all persons who expect to compete in this contest secure a copy of "The Future Farmers of America Manual," (price, 15 cents) printed and for sale by the Farm Journal, Washington Square, Philadelphia, Pennsylvania. The material contained in this publication will supply necessary information about the F. F. A.

All songs submitted will be reviewed by a committee of competent persons, and they shall select three or more of the songs most suitable and appropriate. The songs selected by the committee will be rendered before the delegates at the Sixth National Convention of Future Farmers of America, to be held November 17-24, 1933. The delegates present will make the final selections.

Rules governing the F. F. A. song-writing contest:

1. The composition, including words and piano accompaniment, must be original.

2. Words and music may be by the same author or by different authors. In case of joint authorship, the prize may be divided according to the wishes of the authors.

3. Two completed copies of the composition, on manuscript paper ready for rendition and in form suitable for printing, must be submitted.

4. Both copies of the song submitted must bear the following information at the end of *each* manuscript submitted:
   a. Name of author or authors.
   b. Share of authorship (if more than one author).
   c. Complete address of author or authors.

5. Entries as indicated may be submitted up to November 1, 1933. All entries must be mailed on or before that date to:
   The Executive Secretary,
   Future Farmers of America,
   1800 H Street NW.,
   Washington, D. C.

6. Authors will be duly credited with their composition, but receipt and acceptance of prize money will constitute evidence of the fact that authors thereby relinquish all rights and claim to their compositions, and that the said composition henceforth becomes sole property of the Future Farmers of America.

7. Manuscripts will be returned to the authors, on request.

PRIZES

1st prize song	$75
2nd prize song	50
3rd prize song	25

F. F. A's. Plant and Seed School Grounds

RUSSELL B. DICKERSON, Adviser, Sussex Chapter, New Jersey

AFTER the thrill of getting into our new high school building had subsided last fall, we were asked by our Board of Education if the Chapter would be interested in assuming the responsibility of planting shrubbery and seeding the lawns.

A special meeting of the chapter was called, and the proposition was put up to the members. After many questions and lengthly discussions there was unanimous consent to assume the responsibility of directing the work and doing as much of it as possible.

Because the grading would not be finished until late in the fall and all graded areas should have time to settle, the planting was put off until spring.

During the winter a plan of improving and preparing the seed bed was worked out in class, and many interesting class discussions benefitted everyone.

The planting plan, as developed by the classes, accompanied by estimates of cost was presented to the Board at the March meeting. The plan was accepted, and the adviser was instructed to go ahead with the plan under the direction of the Building and Grounds Committee.

For the lawns our plan included manuring, plowing, harrowing, and seeding to oats. The oats were plowed under for green manure in July, and grass seed sowed in late August, preceded by frequent harrowings during July and August.

A 400-foot terrace 20 feet wide extends the entire width of the grounds in front of the building. Our plan included the setting out of 1,900 Japanese Barberry (Barberis Thunbergi) on this terrace leaving a 20 x 40 foot space for bleachers flanking the ball diamond.

The location of rows and plants were lined and staked, the holes dug, plants set, and ground leveled off during our two 90-minute periods of 5 days.

Twenty-five boys were on the job for the 5 days, and all had turns at the respective jobs, which prevented the work from getting monotonous. On the third day we set out 600 plants, the record for the job.

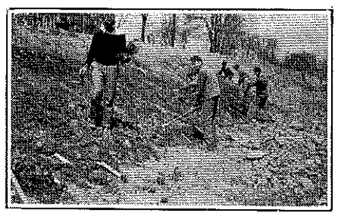
This terrace has a 40 per cent grade, and our reasons for recommending Barberry were to hold the soil, do away with having to mow any grass, and keep school people from running up and down in spring and fall and sliding down it in the winter.

The bleachers with a seating capacity of 200 people will be constructed by the F. F. A. boys during farm shop periods, under the direction of the manual training instructor and the adviser.

The adviser also has the responsibility of directing some drainage work in connection with a large seepage area back of the building, in an attempt to make a parking space for cars. The classes have had an opportunity to study this drainage problem, and the boys are watching developments with keen interest.

We plan to be able to plant some shrubbery in the fall and more next spring. And so on each year, until our planting plan is completed.

An attempt has been made to discuss the work and put it across to the classes in such a manner that the boys will be able to use the information in the future for their own benefit or for the benefit of others through an advisory capacity. The interest, enthusiasm, and willingness to work has been outstanding since the agreement was made last September.



Sussex, New Jersey, F. F. A's planted 1,900 Japanese Barberry plants as part of a chapter project in landscaping the school grounds

Athletics and F. F. A.

F. F. A. is not just another organization. It most certainly is not an organization to promote athletics. If your chapter has to resort to all kinds of athletic contests, especially basketball, football, volleyball, and the like, to keep up interest, we are certain that there is something wrong. F. F. A. is a national organization of, for, and by farm boys who are learning to farm. There are plenty of opportunities in the present school set-up to learn athletics. We may reasonably expect farmers to learn to play together, but we believe that these play activities will not need any considerable part of F. F. A. time. It is highly desirable to develop various play activities that involve participation of the whole membership—typical, wholesome, rural-life activities. Here is a good conference topic for one session of the Leaders' Training Conference.—West Virginia Pilot.

Initiation Ceremonies

INITIATION into the F. F. A. organization marks a turning point in the life of the farm boy. He is entering an organization as a Green Hand, the sole purpose of which is to afford an agency through which boys who are learning to farm may learn to work together. It is or should be a serious affair. The ritual for each degree is a beautiful one. Much of its beauty and meaning and certainly forcefulness is lost unless each officer knows his part and can give it with force and dignity. An orderly arranged room with all F. F. A. insignia in place adds much to the performance. Sufficient rehearsals should be held to assure a smoothly working organization. Decorating the room helps make the occasion a special one. (These are some of the elements of true culture.)

Horse play, such as paddling, handed down from former college days, has no place in an organization of Future Farmers, neither have coarse language and crude jokes.

Advancement to the Future Farmer Degree should never be done until the candidate has fulfilled the requirements beyond any reason for doubt. Special attention should be given to the initiation ceremonies, that they may be on a very high plane, and if so, will be long remembered by the candidate. The adviser of your chapter is by virtue of his office a member. You can confer upon him the Honorary Future Farmer Degree if he merits it. Read your blue and gold manual.—West Virginia Pilot.

Buying Seed Potatoes

THE State Association's committee on seed potatoes purchased 3,085 bushels of U. S. No. 1 Certified Irish Cobbler seed potatoes for the cooperating chapters in West Virginia, direct from the William A. Broyles Chapter, F. F. A., Park River, North Dakota. In addition, 1,200 bushels of Maine-grown certified Green Mountains were purchased through the American Fruit Growers. Several local chapters pooled their orders for seed and purchased independently.

This is the second year that the West Virginia Association has purchased seed in a state-wide way, and the first time that it has purchased from its own associates in another state. We believe

organization has functioned in this way in the United States. The state is divided into five regions. Each has a member of the State Potato Commodity Committee. Each local chapter has a seed potato committee. It is entirely optional as to whether a local chapter or an individual will participate in the state buying pool.

The whole purpose of this activity is to enable the boys to learn to work together. Activities like this afford large learning values in working together, and are very worthwhile for the geographical, mathematical, banking, bookkeeping, and other business activities involved in the transaction. —West Virginia Vo-Ag. Pilot.

How Louisiana Boys Reach Their Objective

WE FOUND it a bit difficult to reach some of the objectives in our program of work. After a careful analysis of the troubles, we decided that the work of the chapter was not properly distributed among the members. To alleviate this trouble, a large chart of the objectives was posted on our F. F. A Bulletin Board. The chart includes not only a list of the objectives, but the month in which each objective is to be accomplished, the names of the boys on the committees for each objective, and statements of the committee as to the extent of the accomplishment. This plan gives every member some responsibility and creates competition among the committees. To a very great extent our plan leads to the completion of all the objectives of the chapter for the year.—H. J. Brand, Adviser, Reserve, La.

Accomplishments of F. F. A. Chapter During Past Year

April

Father and Son Banquet.
Sponsored "Rock Hauling Contest" to get rocks to place around drive.
Placed 1,299 square feet of sod on clay bank by cistern.

May

Made side walk at edge of driveway.
Placed curbing around center drive.
Placed sod around center drive.
Cut off and painted posts around circle in drive.
Made walk to pump-house.
Cut weeds out of front lawn.
Scattered screenings in driveway.
Gave "Weiner Roast."
Fertilized trees set in January.
Added 2,000 bulletins to library.
Added new lot of agriculture equipment to room.
Filled up gullies in school grounds.

June

Had ice cream supper for all Future Farmers.
Had a camp at Valley View.
Entertained parents one night at the camp.
Added many new insects to collection.

July

Raised money for "Stamping Ground Community Fair."
Gave ice cream supper for Future Farmers.
Hung new pictures in the agriculture room.
Took photographs of boys working in projects.
Added 25 new bulletin boxes to library.

August

Had ice cream supper for Future Farmers.
Started advertising Stamping Ground Community Fair.
Sent representative to state Future Farmer convention.

September

Sponsored Stamping Ground Community Fair, which 2,500 people attended.
Future Farmers won ½ the prizes in open competition with county.
Agriculture class increased by 50 per cent.
Had an ice cream supper and made $10.
Placed steel trash barrels under fire escape.
Held initiating ceremony for new members to local F. F. A. chapter.
Official F. F. A. band played at Fair.
Future Farmer cup awarded to Lloyd Burrows.
Future Farmer Association gave $10 to Stamping Ground Community Fair.

October

Paid state and national Future Farmer dues.
Made $7 from F. F. A. concession at Fair.
Officers memorized parts for Future Farmer meetings.
All members learned parliamentary law for use in F. F. A. meetings.
Mounted in glass case over 200 insects of community.
Cockerels from eggs given by Farmers Deposit Bank of Stamping Ground were sold.
Purchased 62 dollars worth of new books for library.

November

Set up 1933 farm practice programs.
Had "Weiner Roast."
Made new equipment for 1933 "Community Fair."
Added more equipment to farm shop.
Mounted diseased plants and animals for use in agriculture.

December

Elected new officers of Future Farmer Association.
Elected new officers for news letter.
Purchased two registered Duroc-Jersey gilts.
Gave party at gymnasium.
Set 65 cedar trees around school.
Put on a magazine campaign and made $10.

January

Seventeen inch silver loving cup given to F. F. A. for boys having best farm practice program.
Tested the water supply of all boys and found four contaminated.
Tested butterfat in the milk boys brought from home.
Sponsored "Evening School" on farm management.
Mixed 800 pounds of chicken feed for Future Farmers.

February

Moved several hundred rocks out of grass in front yard.
Mixed 600 pounds of hog mineral co-operatively.
Mixed 300 pounds of sheep mineral co-operatively.
Sowed grass seed on bare spots in front yard and fertilized grass.
Covered bare spots in yard with brush.
Boys having dairy projects started testing their milk monthly.
Built tables for P. T. A.
Whip-grafted 150 apple trees to be planted this spring.

March

Bought fertilizer co-operatively for tobacco plant beds.
Secured a forge for farm shop.
Remodeled farm shop.
Added another room to the agriculture department.
Secured anvil and blacksmith tools from County Board.
Pruned fruit trees and grapes in community.
Had a Father and Son Banquet.
Gave "Sportsmanship Trophy" at District Tournament—Stamping Ground, Kentucky, News Letter.

Home Projects in Farm Mechanics

(Continued from page 61)

by the above report, gave him an opportunity to apply under actual farm conditions what he had learned in the school shop in woodwork, painting, concrete work, pipe fitting, auto and gas engine repair, machinery repair, tool sharpening, and arranging a home shop.

Teachers who have worked on a program of this kind see the following benefits after their year's trial:

1. A practical solution of the problem faced by teachers with small, ill-equipped shops.

2. An increased interest of pupils in the instruction given in the school shop.

3. An opportunity to give the boy who lives 20, 30, or 50 miles from school the same chance to work on real farm jobs of his own as the boy who lives close to town.

4. Another contact with the home farm and with the parents, and as a result:

5. An increased interest and appreciation on the part of parents as to the value of the instruction their sons are getting in vocational agriculture and farm mechanics.

IT'S QUEER

When some teacher is after a job and wants a recommendation, what a difference it makes—

If his reports were complete, accurate, and on time,

If special requests for information were quickly met, or disregarded—

If you know he should have had certain forms and information in his files and you have found that he didn't have them,

If he didn't attempt an evening or part-time class or organize an F. F. A.

If he wrote in in April wondering where to get project notebooks.
—South Dakota News Letter