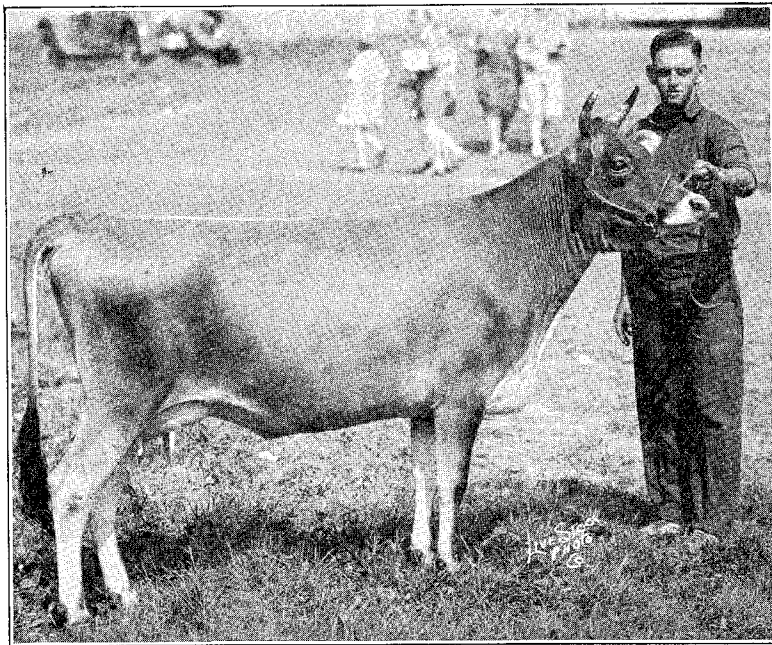


Agricultural Education



Vernon Knudson, West Salem, Wisconsin, started supervised practice with a purebred Jersey calf. Now owns a herd of ten purebred Jerseys and a one-third interest in West Salem Hatchery

"I have never seen the advantage of teaching children how to live without teaching them how to make a living."—JOHN CALLAHAN.

EDITORIAL COMMENT

AGRICULTURAL EDUCATION

A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by the Meredith Publishing Company, at Des Moines, Iowa.

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THE RETIRING EDITOR

FOR two strenuous years the destinies of *Agricultural Education* have been guided by Professor H. M. Hamlin of Iowa State College.

Only an unflinching energy and a high sense of service coupled with unusual ability could have brought the magazine to its present condition in so short a time.

Pioneering is always difficult. These difficulties become greater in the face of previous defeats and current discouragements. The birth and early infancy of *Agricultural Education* were attended with many trials and tribulations. Only a doctor possessing extraordinary perseverance and skill could have brought it to its present state of lusty health.

Professor Hamlin is to be retained on the staff as Associate Editor. In this capacity, his continued active interest and advice are assured.

CONSULTING PHYSICIANS

THE members of the original Editing-Managing Board deserve much credit for the success attained.

No one of them but gave unstintingly of his time and thought in times of stress. The files of the past two years are an interesting study of the prescriptions made by these men in an effort to overcome obstacles to success.

For the Meredith Publishing Company, Editor Kirk Fox and Business Manager M. A. Hunnicutt have responded with help in the most useful manner possible. There is no question but that these men have contributed as much as any others to the success of this venture.

BASIC POLICY

THE high standards for the magazine which were established during its first year will be maintained. The editors will continue to follow the policy of accepting material for publication primarily upon the basis of its value to the teacher of agriculture in the field.

Insofar as the needs and desires of these teachers can be discovered, it is hoped to meet them in the pages of this magazine. Its chief purpose is to be of service in bringing about improvement in the profession of agricultural education.

TEACHERS AS CONTRIBUTORS

IN FURTHERANCE of the above policy, it is hoped that there may be an increase in interesting and helpful contributions from teachers.

Other teachers will be interested in reading items describing unusual successes or means of conducting the work. It is in line with the spirit of co-operation that all should contribute toward the success of our mutual undertaking.

A list of special editors appears at the top of this page. Contributions should be carefully prepared and mailed to the editor assigned to the field with which the item deals.

FARM MECHANICS EDITOR

AMONG the more important activities of the teacher of agriculture are those which have to do with the preparation of his students for the new era of power farming.

We feel that we are fortunate, therefore, in securing Professor M. A. Sharp of Iowa State College as special editor for Farm Mechanics. He is well qualified by experience and interest to secure and edit worthwhile contributions in this field.

Professor Sharp was raised on a farm in Nebraska. He has been a carpenter and auto mechanic; a teacher of manual training and vocational agriculture; a seaplane pilot in the United States naval air service; and a state supervisor of agricultural education.

Graduating with a B. S. in agriculture from Nebraska in 1915, Professor Sharp earned his Master's in vocational education from Iowa State College in 1928. He is now assistant professor of agricultural engineering at Iowa State and teaches shop and methods courses for vocational trainees.



M. A. Sharp

EVENING SCHOOLS EDITOR



J. T. Wheeler

RURAL adult education by means of evening schools is now recognized as an important phase of the work of vocational agriculture teachers.

With this in mind, we have asked Professor John T. Wheeler of Georgia to act as special editor in this field. We have every confidence in his ability and anticipate that this department will be of real value to all agriculture teachers.

Professor Wheeler was reared on a farm and graduated from the Wisconsin College of Agriculture, receiving later, an

M. S. degree from the same institution. He is pursuing graduate work at Cornell as his duties permit.

Professor Wheeler's teaching experience includes rural school work, city superintendency, high school agriculture teacher including evening schools, teaching in teachers' college, professor of horticulture, and teacher trainer in vocational agriculture. He is now in charge of agriculture teacher training in the College of Agriculture, Athens, Georgia.

This issue of *Agricultural Education* contains contributions from 20 different states. We shall continue to keep the magazine national in character so far as possible.

Methods

Method in Teaching As I Understand It

T. H. EATON, Professor of Rural Education, Cornell University, Ithaca, New York

Dr. Eaton was born in Missouri and reared in the states of Texas, Arkansas, Wisconsin, Michigan, and Massachusetts. He has been a farmer; a high school teacher and principal; a college instructor in agriculture, education, and rural education; and a state supervisor of agricultural education. He is the author of "Education and Vocations," a Wiley book of 1926.



T. H. Eaton

boys to plan a chicken house. In teaching, method starts from an object sought and ends in a result accomplished that corresponds to the object sought. In between are a series of activities directed by the object and to the result that make up method.

Described *staccato* the "cycle of production in teaching" is like this: The teacher, in the light of what he wants the pupils to learn, plans what they should do to learn it. In the light of what they should do to learn he plans what he should do to cause them to do so. (So far method is in the planning stage.) Next, in the light of what he has planned to do the teacher *does*. (Method enters the execution stage.) Now, because of what the teacher does—if his procedures are properly chosen and executed—the pupils do what the teacher designed they should do. By so doing, if the teacher's plan for their activities was correct, the pupils acquire the attitude, the ideas, or the modes of action that the teacher intended they should acquire, and the method has produced a result in accord with the object of teaching.

Sound and Economical Method

Method is *sound* in the degree that it is successful, i.e., in the degree that the result achieved conforms to the object that gave birth to the method. Method is *economical* in the degree that it avoids loss of time, misdirection of effort, or waste of materials. A good method is both sound and economical.

It may be noted here that, as I see it, good method has nothing to do with the significance of the object chosen, or the value of the result to the individual or society. Good methods may effect economically and completely quite insignificant or even positively undesirable educational results. Poor methods may be devoted to objects of high significance and their slight success be, nevertheless, a very valuable contribution to individ-

ual or social welfare. Good education should combine, of course, worthy objects with good methods. But this discussion is not upon good education. It is upon method as teaching for the attainment of chosen objects. Mere promotion of "pupil activity" in the faith that good results must come thereupon, is not method, in the view here set forth.

A *clear-cut object* is the first factor in the determination of good method. The teacher should know just as exactly as possible what attitudes, ideas, and modes of action he desires to produce—attitudes toward what, ideas of what, actions with or in reference to what. For attitudes, ideas, and actions are responses to situations. If evoked in connection with situations quite unlike those in which they are supposed to function, learning, tho real, is futile for the intended use. The object should include the kind of situation in which the response is desired, as well as the response desired. (The response, e.g., "prune to whip," belongs to the job of preparing young peach trees for setting, not to the job of preparing young apple trees.) If it does so—since the reaction by which pupils learn must be like that to which education purports to dispose them—then the clue to pupil activity is given in the teacher's object.

Pupil Preparation

But pupils may not be equipped to undertake the learning—i.e., to meet the teaching situation—implied in the object. They may be unready for the stimuli that eventually may be used. For example, a boy may learn to plan a chicken house by planning one, but before he can undertake to learn by planning one he must know what a chicken house is and what purposes it serves or should serve. The teacher must often "prepare" pupils to attack a problem chosen to teach them what the teacher really desires them to learn. Preparation means to accomplish certain subordinate objects prior to attacking the main object.

Thus method is conditioned both as to economy and effectiveness by the *qualifications of the pupils* to be taught. A teacher should know the capacities of his pupils and their equipment of experience, at least in relation to the implications of his object. If the object points to a problem in planning a poultry house, he should know that the youngsters can write and figure, use a ruler and pencil, understand that a line stands for a wall in this case, a door in

that, and so on. But in the degree that he does know the pertinent experience of pupils, their temperaments and capacities, he knows the sorts of stimuli to which they are likely to respond. And this is the key to procedure; for procedure is no more than the provision of stimuli. Effective procedure supplies the right stimuli among others; economical procedure supplies only the right stimuli.

But the stimuli that a teacher can provide depend quite as much upon his *resources*, as upon the demands of the occasion; upon what he is equipped to say and to do, what materials of symbol and thing—e.g., books, charts, pictures, and tools, crops, animals—are available to his use. Thus a third factor enters to condition method. From the side of resources method is good in the degree that the teacher selects and uses the stimuli available that provoke the proper activity in closest approximation to the pattern implied in the object.

Method Described

Method, then, is an organization of activities of teacher and pupils proper to the *object of teaching*; proper to the *qualifications of pupils*; proper to the *resources of the teacher*. One who would describe usefully for others a method of teaching should make clear:

1. The object or aim of the teaching.
2. The pertinent qualifications, and limitations, of the pupils.
3. The available resources of the teacher significant to attaining his object.

In the light of these he may hopefully describe:

- (a) The design or plan of learning activities;
- (b) The design and execution of teacher's procedures;
- (c) The learning activities of the pupils consequent upon procedure.

On the rare occasions when it is possible, he may—and should describe the results accomplished, that they may be compared with the object of teaching, and the success of the method fairly judged.

Source Bulletin

A "List of Available Publications" of the United States Department of Agriculture, Misc. Pub. No. 60 can be secured free of charge from the office of Information, U. S. D. A., Washington, D. C. Every teacher of agriculture should have this list and use it.

The Use of Farm Cost Studies in Course Construction

G. P. DEYOE, State Teachers College, Platteville, Wisconsin

WHEN planning courses, instructors in vocational agriculture should give more attention to those practices and activities which are most closely associated with success in farming.

A course of study in vocational agriculture for a given community will probably be developed from information which has been gathered from several sources. The progressive type of instructor will undoubtedly gather information for this purpose by making surveys of farms in the community, by analyzing the methods of the farmers who seem to be most successful, by making general activity or job analyses of farming and farm enterprises, and by the utilization of other methods more or less scientific in nature.

These procedures have become somewhat standardized in many states and without doubt their intelligent use has placed course of study construction in vocational agriculture on a fairly scientific basis. These methods are certainly valuable in determining the general level of efficiency and extensiveness of each of the various farm enterprises in a given community and for developing an array of activities which should be given consideration in a course of study. However, such methods are not entirely satisfactory for the determination of the relative importance of the various activities.

Important Problem

This problem is certainly significant and one which cannot readily be solved in its entirety. The application of the method of expert opinion by questioning many of our "master farmers" has been suggested in a recent article in *Agricultural Education*. This method without doubt has its merits. Perhaps the solution of this problem will be reached by a combination of methods at the disposal of the instructors in vocational agriculture.

The purpose of the present article is to point out the possible use, by instructors in vocational agriculture, of the materials which are available in farm cost studies. Such information and data as are to be found in these studies may be of value in verifying the course content and in determining those activities which are of greatest importance. In addition, valuable data are provided which should be helpful in setting up standards, formulating problems, and developing fundamental principles of farm management.

Many farm cost studies have been made which have been supervised and the results summarized by experts in agricultural economics and other specialists associated with our agricultural colleges. In many instances agriculture instructors are located in communities where farm cost studies have been made, or in communities where conditions correspond closely with those for which such studies are available. There probably are many phases of these investigations which have rather general application. Numerous summaries of

One of the most common faults in the vocational agriculture course of study is the tendency to try to cover the whole subject.

This practice results too often in the slighting of the more important jobs—those jobs upon which real success actually depends.

We must realize that we cannot "cover" animal husbandry in one year. Our principle task in planning this course is to select the important jobs and only enough of these that we can teach them thoroly. It is much more desirable that we train our students thoroly in a few important jobs than that we give them a smattering of many.

cost accounting projects are available in bulletin and pamphlet form. Some of these studies have been organized and analyzed so as to make them more valuable than others for the purposes mentioned and therefore it is desirable to use judgment in their selection.

Many of the cost account studies include definite attempts to analyze the extent to which certain activities are associated with success in the production phases of certain farm enterprises. For example, in a study of the hog enterprise in Humboldt County, Iowa, it was found that the more efficient producers of hogs had higher quality of breeding stock, the sows were fed better rations, the buildings were more sanitary and had superior ventilation, fewer pigs were lost previous to weaning, and better methods of feeding were used after weaning. The activities which are most closely associated with success in hog raising are clearly suggested by this analysis. In a similar manner, analyses have been included in some of the cost studies for other farm enterprises which reveal the activities that appear to be especially important in efficient production. By the intelligent use of such analyses, it is possible for the instructor to verify many of the activities which he has included in the course of study and to determine those activities which apparently should be given the most emphasis.

Data of Value

Many valuable data are to be found in these cost studies which may be utilized to supplement other materials in setting up standards of production by means of which community practices and project records may be judged. Every instructor will probably wish to develop such standards as the amount of feed for the production of 100 pounds of pork, the hours of various types of labor for producing an acre of corn under certain conditions, and the amount of feed and labor for keeping a horse one year. These and other standards for a given community will probably be derived by utilizing information from several sources, but some of the data to be found in certain farm cost studies should be especially valuable for this purpose.

Data found in cost account studies may also be valuable if made available to the students in the solution of many

class problems. Such information and data may also be helpful to the instructor in the formulation of problems involving costs of production. Basic materials for deriving general principles of farm management are also available in many of the cost studies. For example, it is shown in one of the Illinois reports that such elements as crop yields, kinds of crops grown, livestock efficiency, use of man labor, use of power and machinery and others, are closely associated with farming success. Such data could well be utilized in the classwork for the advanced year in vocational agriculture.

It is suggested that instructors gradually accumulate a body of data, similar to what is suggested here, as a result of records on student and community projects and from projects in general farm cost accounting under the supervision of local departments of vocational agriculture. Such work is certainly to be encouraged but in order to be valuable it will be necessary to perform careful analyses and statistical treatments similar to the methods used in many of the cost studies to which reference has been made.

Methods of Use

In summary, it is suggested that materials which are available in farm cost studies may be valuable to instructors in vocational agriculture in the following ways:

- (1) For verifying the content of courses of study which instructors in vocational agriculture have derived by the use of other methods.
- (2) For supplementing data from other sources in setting up production standards.
- (3) For furnishing data in the solution and formulation of vital class problems.
- (4) For providing basic materials in the derivation of general principles of farm management.

Annual reports of farm cost routes are available in Iowa, Illinois, Minnesota, and other states. These may be obtained by writing to the departments of farm management in the institutions of the respective states. Such reports are valuable when used as suggested above.

Linke and Gregory Honored

JOHN A. LINKE, Federal Agent for the North Central States, and **R. W. GREGORY**, Itinerant Teacher Trainer for Indiana, have been presented with life memberships in the American Vocational Association.

Following a banquet tendered to the North Central Conference by the W. M. Welch Manufacturing Company in Chicago on March 25, friends and co-workers of these two men staged the show. Mr. Linke's membership was the gift of the state supervisors and teacher trainers of his region; Mr. Gregory's came from the vocational agriculture teachers and other agricultural education workers in Indiana.



Professional



Annual Regional Conference Called by the Federal Board

DIRECTORS, supervisors, and teacher trainers in agricultural education are in attendance at conferences called for the various regions during March, April, and May.

The North Atlantic Conference was held in New York City on March 10-13; the North Central Conference convened at Chicago, March 24-27; the Southern Region met at Biloxi, Mississippi, March 31 to April 5; and the Western Conference will be held at Phoenix, Arizona, on May 5-8.

Dr. C. H. Lane, Chief of the Agricultural Education Service of the Federal Board, is attending all conferences. Mr. C. M. Henry, member of the Federal Board representing agriculture, is also making the rounds. Dr. F. W. Lathrop, H. B. Swanson, J. M. Pearson, and W. A. Ross, recently appointed specialists, are finding it possible to be present in some regions.

While the majority of those participating in the conferences are teacher trainers or supervisors, a few vocational teachers are attending some of the meetings.

These conferences are strenuous but extremely valuable devices leading to the advancement of vocational agricultural education. Called by the Federal Board, the programs are largely in the hands of the regional group. Both regional and national problems of agricultural education are exposed to the clear light of thoughtful discussion. There is a constant tendency to improve the quality of discussion in that mere opinion is no more regarded with favor, the demand being for proven fact as a basis for argument.

The writer has been in the midst of the Central Regional Conference for the last few days. Chicago allowed us to assemble and then staged an old-fashioned blizzard as an indication of its desire to keep us. Housed in "The World's Greatest Hotel," however, a city in itself, we were unaffected by weather conditions.

The committee reports presented during the seven half-day and two evening sessions had been particularly well developed. Program building, measurement, methods, research, teacher supply, professional advancement, Future Farmers of America, and similar problems were ably presented and vigorously discussed.

Another N. E. A. Life Member

The Vocational Agriculture Teachers of Michigan have presented their state supervisor, Mr. E. E. Gallup, with a life membership in the National Education Association.

Arkansas Master Teacher

J. W. HULL, instructor of Smith-Hughes vocational agriculture in the Danville High School, Yell County, has been selected as Arkansas' master teacher of vocational agriculture for 1929.

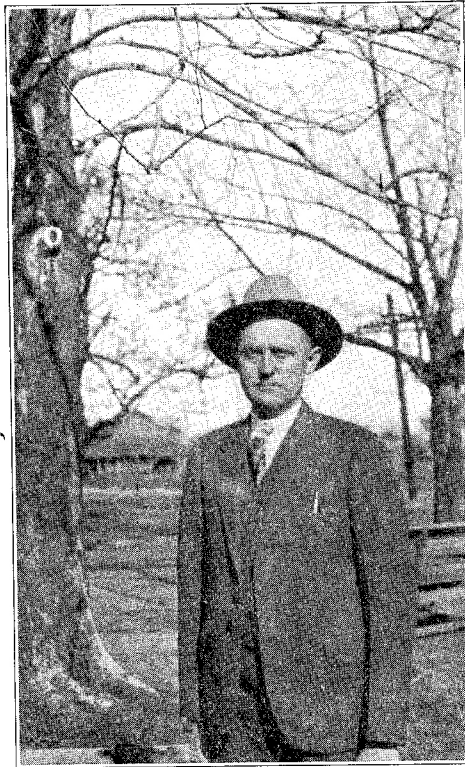
The selection was made from the 175 Smith-Hughes agricultural teachers in the state by a committee appointed by E. B. Matthew, state director of vocational education, and R. B. Smith, state supervisor of vocational agriculture.

Last year Fred A. Smith, vocational

the increased earnings for the year amounted to \$71,300. Projects included corn, cotton, hay, pastures, dairy cattle, swine, poultry, and fruit crops, thus constituting a well balanced program of farming.

The Danville school district has increased in area 300 percent since Mr. Hull went there in 1923, due largely to his efforts to bring the farmer and business men of Danville into closer contact. He has been connected with the Danville Chamber of Commerce several years and has served as president of that organization for the past two years.

Effectiveness of his program has been reflected in farming practices in the Danville trade territory. Prior to 1923 cotton was the principal crop grown on the gullied fields of that section. Now more than 500 acres of hill land have been terraced, farmers are using better seed and are fertilizing crops by approved scientific methods. Growing of a variety of cash crops, as well as a variety of feed and soil building crops has made that section of Yell County outstanding as a farming area.



J. W. Hull, A. M. T.

agricultural instructor at Dardanelle, Yell County, was awarded the title of master teacher of Arkansas and of the Southern states.

The master teacher is selected on the basis of achievements during the year, and the judges depend largely upon briefs prepared by the teachers, outlining their work. A score card, approved by the Federal Board of Vocational Education is used in rating contestants.

The judges found that Mr. Hull made a perfect score. His program included 61 high school students enrolled in agricultural classes, and 143 adult farmers who attended night classes for unit courses of instruction in agricultural subjects. The project labor income for all these students was \$45,614.04, while

Co-operation by Teachers

HE four teachers of vocational agriculture in Clark County, Illinois, have worked out together during the fall and winter, yearly teaching plans for soils and crops and animal husbandry, using the job analysis and seasonal sequence plan.

The first step was to decide on the different enterprises that should be taught during the year, and the number of weeks that should be devoted to each enterprise. This would be practically the same for each school, because of the similarity of farming conditions in the county. Next a list of jobs under each enterprise was selected, and the days that should be spent on this particular job was then taken up separately and analyzed, bringing out the *what, where, when, how, and why*.

New York University Dedicates New Building

ON FEBRUARY 28 and March 1 the new building of the School of Education of New York University was formally dedicated.

The building houses various education centers including art, vocations, home economics, music, mental hygiene, social adjustment of gifted, business, physical and health, and aeronautics.

The principal address at the opening of the vocational-education center was delivered by Dr. L. A. Wilson, director of vocational education for New York.



Supervised Practice



Telling the Project Story With Pictures

L. L. SCRANTON,
Professor of Agricultural Education,
Fargo, North Dakota

YOUR boys should be encouraged to take snapshots of their projects from time to time. A picture record of a project from beginning to end is valuable as future reference in the classroom, as illustrative material in teaching, as an historical record, and as evidence of results actually obtained. Interest in building up a complete project story will also be stimulated if the "picture story" feature is included.

Vocational teachers' comments:

"Every vocational teacher should have a camera and take pictures of his boys at work on their projects. Pictures may express more than words. They give an added interest to project work. These project pictures when enlarged, framed, and titled make the best kind of pictures for an agricultural room. Place the picture in the main hall of the school building or a window of some popular business house and passersby are never too busy to stop a moment to see whose boys those are and what they are doing.

"At the present time I am planning a picture story contest for the boy with projects this summer. The aim is to get as many project practices in pictures as possible. I will take as many as I can myself, but I feel that perhaps we would get better results if the boys take several snaps at different times when I might not be able to get them. I would like to have at least three or four projects completely shown in some detail by pictures for the fair exhibits next fall, as we are planning a vocational agricultural booth at the county fair, and possibly a township booth besides."

The following suggestions for taking and preserving project pictures may be helpful:

1. Study your camera. Keep such records as will make it possible to give proper time to your exposures and judge distances most effectively.

2. Ordinarily subjects should not be "posed" for a picture.

3. Select the particular part of your view which is most important for illustrative purposes and focus upon that particular part.

4. Try to take a picture of a project every few weeks from the *beginning* to the *end*. A continuous growing record of this sort is a very useful record for the boy and valuable material for teaching purposes.

5. Be sure that complete and correct data accompany each picture as you file it.

6. A complete photographic file should be kept in the classroom or school library if you have an official school camera. If you use your personal camera you will, of course, wish to keep your own file.

7. One excellent method of filing is to place the film in an envelope and the prints on the outside with a written label beneath the print. File by subjects or use a cross reference card catalog.

A Class Poultry Project

F. A. BLAUER,
Teacher of Agriculture, Lebanon, Kansas

THE class project has served as an excellent teaching device in the Lebanon, Kansas, schools during the past year. The demand for a project of the farm unit size, where the boys manage and assume full responsibility, brought about this undertaking in a relatively new field of agricultural education.

Due to limited facilities at home and the boys being away at school during the fall and winter seasons, it is difficult to have the laying flock as a practical home project. To overcome these handicaps the Lebanon vocational agriculture boys decided to carry a poultry laying flock class project.

Convenient grounds adjacent to the school were arranged for. Each of the 17 boys enrolled in Animal Husbandry agreed to help build a poultry house, equipment, and yards; to furnish six pullets; and to share expenses, receipts, and time in caring for the birds for six months. The school board agreed to furnish the poultry house, grounds, and equipment. For running expenses until the pullets came into production in the fall, money was borrowed at the local bank and a blanket note was signed by the boys.

The first jobs of the boys were shop jobs. Selecting a poultry house was first. Estimating and laying a founda-

tion, which gave practice in building forms, mixing and reinforcing concrete, was next. Cutting studding and rafters, fitting windows and doors, shingling and painting, and wiring the house for winter lights furnished excellent shop work. Sheet metal work entered in for the tin trap nests were to be made. In building the poultry house practically all jobs in minor farm building construction were done by the boys.

After the shop jobs came jobs for classroom study, field trips, and laboratory. Some of the principal ones were: selecting pullets, treating for lice, worming, feeding, housing, trap nesting, marketing and grading eggs, disease prevention and winter egg production. Interest of the class members was unusually good during the discussion and performance of these jobs. Perhaps it was due to the immediate application that would be made of the information.

A contest spirit prevails among the boys. Such questions as, "Whose pullets laid the most eggs this week?" "How many eggs today?" and "How are the birds doing?" are often heard.

The class project has had its community influence. Three poultry houses have been remodeled to include the advantages of the class project poultry house. Numerous dry mash hoppers and waterers have been made in farm shop and sold in the community. More farmers are using the standard Kansas laying ration.

Perhaps the outstanding result of the class project has been the remarkable gain in production when lights are used to lengthen the hen day. Before lights were turned on, 25 percent production prevailed. Three weeks after lights were in use the production jumped to 63 percent. Another result shown is the effect of proper housing, feed and care upon winter egg production. During January and February, the two coldest winter months in Kansas, the class project production was 50 percent, 25 percent above the community flock average.

These farm boys have gained experience in poultry husbandry and carpentry that they would not have gained had it not been for the class project in vocational agriculture. They have realized a profit. They have learned to work together for mutual advantage.



Started project work with an acre of pedigreed barley, a plot of certified Rural potatoes, and a pure bred Chester White gilt.

The same strains of barley and potatoes are now used as seed on the farm. Project work was continued and expanded with swine, poultry, and dairy cattle as the major enterprises.

Roy Hemingway, New Richmond, Wisconsin

Analyzing Results of Agricultural Projects

R. B. JEPSON, State Supervisor, Nevada

IN ORDER that project records and accounts may have real educational value they must be complete and accurate. Probably the greatest value will be derived by the pupils, however, when the records are analyzed, studied, and comparisons made with results of others engaged in the same enterprise. Plans can then be made for doing a better job the next year.

An analysis and comparison of five turkey projects conducted in Nevada during 1929 is given below:

crease the number raised? What can be done to have more eggs hatch? What influence have the following practices had on the success of the enterprise: Use of grain in the ration? Unbalanced feeding ration? Unsanitary conditions? Turkey thieves? Lack of labor-saving appliances? Care of hens while setting? Care of young poults and hens? Method of marketing? What recommendations would you make for conducting this enterprise another year?

Some of the most worthwhile instruc-

Comparison of net profits of cows with high and low production records, hens with high and low production, good and poor feeding practices, high and low crop yields and sanitation practices are a few methods of using to advantage the project summaries.

Litter Production Results

C. L. ANGERER,
State Supervisor, Missouri

THIRTY-SIX vocational boys from 22 different schools qualified in the litter production contest during the season just past. This contest is a modification of the ton-litter contest. The 180-day weight requirement for litters is scaled to the number of pigs in the litter as indicated in the following tabulation:

Number of Pigs	Weight Requirement (pounds)
8	2,000
9	2,100
10	2,175
11	2,300
12	2,400
13	2,500

John Blatt of Grant City, working under the supervision of his teacher, Ira Nuchols, produced 3,499 pounds of pork in 180 days with a litter of 13 Spotted Polands. This is an all-time record—for Missouri at least.

Thomas Harris of Boonville, with the help of his teacher, W. L. Barrett, secured 2,025 pounds with a litter of only 7 Berkshire-Polands. This is the first time on record that a litter of 7 has been brought to ton weight in six months.

Bert Drake, under the direction of Glen Karls, vocational teacher at Bolivar, produced 2,660 pounds of pork with a litter of 9 Durocs. This is the heaviest average weight per pig on record—295½ pounds at 180 days.

A definite plan for professional improvement is the first step in the upward climb. Thoughtful reading and systematic study should be included in such a plan.

ITEM	Number of Project				
	1	2	3	4	5
1. Number of birds at beginning of project.....	11	10	10	39	7
2. Duration in months.....	10	11	11	12	9
3. Number of eggs laid per bird.....	28.8	34.6	37	No record	No record
4. Number of poults hatched per bird.....	18.8	18.7	22.4	No record	12.4
5. Percentage of eggs set that hatched.....	65%	81%	60%	No record	82%
6. Average number of poults raised to maturity per bird.....	11.2	10	19.7	5.8	9
7. Percentage of poults hatched which are raised to maturity.....	60%	53%	83%	No record	44%
8. Total number of birds raised including original breeders.....	135	100	197	175	45
9. Total cost per bird.....	\$1.93	\$2.87	\$2.01	\$3.17	\$2.46
10. Feed cost per bird.....	1.05	1.91	1.40	1.10	1.00
11. Labor cost per bird.....	.70	.61	.55	.64	.49
12. All other costs.....	.18	.35	.05	1.43	.97
13. Percentages of costs due to feed.....	54.4%	66.5%	69.6%	37.0%	40.8%
14. Percentage of cost due to labor.....	36.2%	21.2%	27.8%	20.1%	20
15. Average market price per bird.....	\$4.25	\$4.17	\$3.02	\$4.32	\$4.23
16. Profit per bird.....	2.32	1.33	1.01	1.15	1.71
17. Hours of labor per bird raised.....	2.8	2.4	1.1	2.3	2
18. Pupils labor income per hour.....	\$1.07	\$3.76	\$1.99	\$0.52	\$1.18
19. Total production in pounds.....	1,700	1,472	2,100	2,100	582
20. Average weight per bird for market.....	12.6	14.7	10.6	12.0	12.9
21. Cost of production per pound.....	\$0.15	\$0.12	\$0.19	\$0.26	\$0.19
22. Profit per pound.....	.18	.09	.09	.09	.13
23. Percentage of labor performed by pupil.....	100%	80%	100%	94%	100%
24. Does pupil expect to continue with enterprise another year?.....	No	Yes	Yes	Yes	Yes
25. Increase or decrease in scope.....	Decrease	Decrease	Same	Increase	Increase

How can material of this kind be used by the teacher? Following the analysis a few leading questions will require the boys to do some thinking. Which of these boys was the most efficient in his project? What things could each do to increase his profits? What can be done to reduce the losses of poults and in-

tion can be done by having boys summarize and study their project records. Many times this is overlooked or neglected entirely. A study of this kind is one of the best means of stimulating interest in continuation projects. It will also help or guide the boys in selecting and planning their projects.

Six Rules for Successful Farm Practice

Adapted From the Original Rules Proposed by Glenn Frank

[Note: This gem is published anonymously because the editor is not quite sure from which state news letter he clipped it. If the author can be determined, he will be given credit in another issue.]

I have found something I never expected to find. I have found a set of "rules for successful work" which I think will apply without a single change to every sort of worker and to every sort of work.

The six rules for successful work which I have found, differ from much of our professional "success" literature in that they are not offered as a magic formula that will make you a millionaire before you are 30 or money refunded. They are offered as being simply the A B C's of effective work in any job, big or little.

1. **Make Your Project Plan in Writing.** This forces you to be clear about your purpose. If you merely mull it over in your mind all sorts of loopholes in your logic will escape you. Most of us do not realize how foggy our ideas are until we try to write them down in clear and simple sentences.

2. **Compare Your Plan With the Methods of Most Successful Farmers and the Recommendations of Agricultural Colleges.** It is always wise to check your own plan against plans that other men or boys have followed successfully when they faced similar problems.

3. **Have Your Plan Criticized in Advance by Those Whom It Will Affect.** Certainly the father and the

teacher should criticize a boy's project plan. Other members of the agricultural class may have helpful criticisms. If you find flaws in your plan before you begin work you will save yourself many mistakes.

4. **Put Your Plan Into Operation.** Otherwise it remains merely a day dream. You may have incorporated in your plan worthwhile practices which you should follow, but if you go out on the farm and fail to practice them your plan has been of little value.

5. **See That Your Plan Keeps Itself in Operation Until Revoked.** Until your plan keeps in operation automatically, you have not really organized it. Maintain an attitude of efficient execution of your project plan.

6. **Keep Your Plan Open to Revision But Do Not Allow It to Be Changed Except After the Most Careful Reasoning.** You must not keep digging up your beans to see if they are growing. Be open minded about your plan, but remember that a mind can be so open that it is draughty. The best minds have swinging doors rather than open doors. They open for a draught of fresh information in order to close on a decision, to be gladly opened again when the decision needs to be revised.



Evening Schools



Successful Poultry Class

ABRAHAM COAN,
Teacher of Agriculture,
Lambertville, New Jersey

SECURING the Group: A course in Poultry Husbandry was given last year at Lambertville, New Jersey, for the benefit of adults and others not able to attend the regular four-year course available in the high school. Poultry husbandry was selected because in Hunterdon County the poultry industry is an important one. The county produces over a million and a half dollars worth of eggs and chickens annually and ranks second in the state.

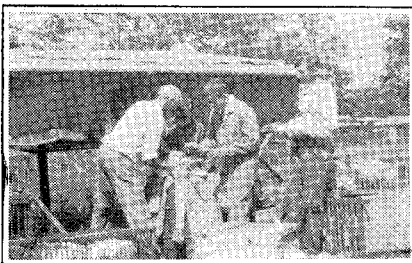
A number of farmers who might be interested in taking such a course were visited by the agricultural instructor and the nature of the work explained to them. A notice giving the time of meeting and the subject matter to be discussed was published in local and nearby newspapers. As a result of this preliminary preparation, six students were present at the first meeting.

A particular effort was made to make the first meeting interesting and practical. Largely thru the enthusiasm and favorable comment among neighbors of this original group the attendance increased until at one of the later meetings the class consisted of 19 and the average attendance for the 10 meetings was 11.5.

Selecting the Course: The subject matter for the first six meetings was tentatively selected by the instructor. At the first meeting, the class revised this preliminary course of study and requested certain additional work which was of vital interest to them. The revised course of study necessitated increasing the number of meetings to 10.

The units of material were presented in seasonal sequence and preceded the time when the work would actually have to be done by the members of the class. Starting with work on disease of mature chickens, the class studied incubation, brooding, rearing young stock, grading and marketing eggs, diseases of baby chicks, poultry house equipment, housing, killing, dressing and marketing poultry, fattening chickens, and feeding.

Methods of Teaching: More time was spent in planning the method of presentation than in the actual teaching. Most of the work was presented in demonstration form. The demonstration was followed by a discussion in which the men contributed the results of their



Follow-up work for Poultry Evening Class

YOUR— OPPORTUNITY RESPONSIBILITY DUTY

Systematic instruction in evening classes in vocational agriculture is relatively new and presents new and numerous problems. There are many teachers, however, in all parts of this country who have successfully met these problems. These teachers have:

1. A special **OPPORTUNITY** to make a contribution to vocational education in agriculture, and
2. A personal **RESPONSIBILITY** in this connection, because literally hundreds of our fellow-teachers are without experience or training in this field.

We want you, therefore, to feel it your personal **DUTY** to tell the special editor of "evening classes"

- What you have done.
- How you did it.
- Where you did it.
- Why you did it.
- Who attended your classes, and
- When you held your classes.

own experience to the lesson. This part of the lesson resembled somewhat the conference method. The demonstration and discussion were supplemented by mimeographed sheets designed to crystallize the teaching objectives. The students seemed to value these sheets very highly and usually saved them for future reference. These sheets stated briefly and clearly the important steps in each lesson and added materially to the effectiveness of the presentation.

Follow-Up Supervision: Most of the men who took the course kept in touch with the agricultural department after the formal course was over. As a result, considerable follow-up work was done among the students. Over six hundred pullets were vaccinated for chicken pox, two old buildings and a cellar were successfully utilized for brooding chicks and one henhouse was completely remodeled.

The remodeling of the henhouse was an unusually thoro piece of work. The building was a narrow one. Therefore the roosts were removed from the back and placed at one end. A large opening was cut in the building so it would have an open front. Pipe was laid into the house to provide an automatic watering arrangement and a tile drain was provided to carry off waste water. The dirt floor was then replaced by a concrete one. Ninety bred-to-lay pullets were placed in this house about October 1 and in November were laying 40 percent without lights.

Other follow-up work included wing-banding pedigreed baby chicks, selecting a pen of birds to enter a New Jersey egg laying contest and many other things.

Several of the men who attended last year requested that the school give an advanced poultry course this winter and this course is now in progress.

Fathers Study Evenings

IRA MONTGOMERY,
Teacher of Agriculture,
Faribault, Minnesota

THE night school course at Faribault, Minnesota enrolled 130 members this year. There were 12 meetings with an average attendance of 37. One encouraging feature was that the attendance started slowly and gradually gained as the news of the work circulated to all parts of the county. New groups of people appeared at almost every session.

The meetings started on November 25 and continued until February 3. We postponed two meetings and held three out of regularly scheduled time. All the meetings were held in the high school agriculture room except three which necessitated a larger room because of large attendance. This arrangement proved ideal as it gave opportunity for using regular teaching devices such as blackboards, charts, testing apparatus, books, bulletins, and tables.

The enrollment was obtained by using circular letters, postcard notices, and stories in our daily newspaper. Before the work started we sent out letters to some 100 farmers telling about the night school work. We asked whether or not they would be interested. The original response was not particularly impressive but it was sufficient to justify a start. The attendance at our first meeting was encouraging and continued to increase up to the last meeting at which we had our largest attendance.

The original plans called for 10 lessons on some one subject, which the group decided at the first meeting should be dairying. Interest and subject matter made it necessary to extend the original number to 12. There are now plans for several more meetings to increase the amount of farm practice work in dairying. It is planned to hold several regular meetings during the spring and summer to study and practice the selection of good dairy animals. These meetings will be held at several of the members' farms, and will be supplemented with periodic visits to the members' farms.

The success of our work was due to:

1. The interest of those attending.
2. Careful attention to preparation of equipment.
3. Notices mailed before each meeting.
4. Careful preparation of subject matter to be studied.

(Cont'd Col. 3, page 57)



Evening class in Dairying at Fairbault, Minnesota

How Shall I Teach My Evening School Class?

P. I. BARKER, Iowa State College, Ames, Iowa

REGARDLESS of whether we are experienced or are trying the evening school for the first time we are wondering what should be done first, and how it should be done. The question of "How shall I go about it to get the best results?" is uppermost in all our minds. Probably most of us have made up our minds as to what our course shall consist of in the main, and then arises the question, "How shall I secure my enrollment?"

The first thing necessary in interesting people in an evening course is to have something definite to offer the prospect. Have a good practical list of problems typewritten which you can present to him for his judgment as to whether he would like to talk these over with his neighbors in a series of evening meetings. Go to those you know who will be most interested first. Catch some of their favorable remarks and use them on some of the less responsive candidates. Spend considerable time with one or two aggressive and well liked men in the community and let them know what it is all about; then get them to help you secure the membership. Frequently the boys of your classes will help you a great deal. If you have a local paper, tell the people about it there by listing the outline of the course, when your school will start, the hour, and the place. Make it sound attractive. Where you have no local paper, work up a good letter or news letter, have it mimeographed, and send it out to every farmer who might be even slightly interested. (Be sure your mimeographed letter is readable.)

Starting the Course

Start the first meeting with a good live problem which will get all who were there to talking it on the streets and your attendance will grow by the next meeting. A good managerial problem seems to me to be one of the best with which to start, such as, "What is the market outlook for our 1929 spring pig crop?" or "Is this a good time to expand my dairy business?" or "How will the market for poultry products hold up this coming year?" With any of these you can surely get people to talking and get real interest, and at the same time you have some real dope to give them.

Another suggestion is to let them know that they have just as important a part in the instruction as you since they are all practical men and had tried many things which have been found successful, and that your part in the program is to bring in the scientific data to match with their experience to solve the common problems of the business. This puts you in a very agreeable position with the students and makes them feel that you are a co-operator and not a dictator.

Have your course well organized. This is of the most importance in keeping the thought moving, preventing duplication, and keeping up the sense of progress by the attendants. Your course should have variety, cover the major problems around which many of the minor ones of the enterprise are grouped, cover a complete cycle if a

unit course is given, and should provide for some fun or play. By variety I mean to provide one good movie, have two good outside speakers, one an extension man and the other a well-read farmer or a business man if he knows his stuff and is not radical on some pet idea. Using charts or graphs, asking the class to bring in certain simple plans and present them to class, bringing in guessing contests like, "What is a pig worth at weaning time?" will all prove to maintain the interest. A field trip during the period of formal lessons should also prove helpful.

General Methods

I have found that by starting a meeting by asking questions and getting many reactions on the same question, considerable interest arises. This gives you a chance to build what you will have to say around the errors in thinking as discovered, or use some man's idea which has been noted as very good. If one of the students can furnish the right answer then it saves you the trouble and pleases him to be recognized. After the questions have been discussed, a summary of the data as furnished by experiments and research on the problem may be given with much effect for all are anxious to find out the answer. They are in more of a spirit of receiving than at the start.

Be well prepared on every lesson. You'd better be safe than sorry. Well prepared notes are very desirable. Plan every lesson and then follow your plan. There is much strength for the teacher in knowing that you know and in being prepared.

Give each student something to do and let him know that he is expected to help himself. Providing the class with three or four bulletins apiece at the start should be of much value. Let them know that you will have an examination at the end, but of course you must not be dominating. Put it in a jovial way and you will have much fun out of it and at the same time carry an interest thruout the course.

Report your attendance to your class and build up a little class or group loyalty. Tell them what is going on in the state and get them to feel that they have a part in a state program and that if they attend regularly they are bringing some credit to you and to their institution when compared with others in the state.

Closing the Course

Have some recognition for those who have attended. The idea of issuing certificates or diplomas is very successful. The children appreciate it and the wives and even the sweethearts think more of their husbands and will-be's after that. It is surely worth trying.

Set up a goal during the last periods of formal instruction to strive toward during the year and outline a summer program including a trip or two to see each other's work.

Get out to see each man at his farm as soon after the close of the school as possible and visit with him.

Fathers Study Evenings

(Continued from page 56)

5. Careful selection and placing of dairy specialists to discuss special problems as they arose out of the program of study.

6. Assistance given by the county agricultural agent, and the daily press.

Thruout we tried to use the discussion method rather than the lecture type of instruction. This was done in order to benefit as much as possible from the experiences of the members of the group.

The course was concluded February 3, with more than 100 in attendance. This meeting was held in the high school auditorium. The principal of the high school gave an address on adult education; the superintendent presented certificates to 18 farmers who had attended regularly during the 12 meetings; the home economics teachers served lunch; the music teachers furnished music. It was a high school affair. Our night school work is considered a part of the regular high school program.

Summary: The night school work gave to 130 farm people practical information which they can profitably use at once on their home farms.

The appreciation expressed by the group gives to our department 50 or more active co-operators who will help to make all our work more popular and more effective.

Many of the members of the night school were parents of boys studying agriculture in the all-day classes. The fact that parents studied about farming in the agriculture room and used this information has a tremendously beneficial effect on the quality of work done in our regular day classes in agriculture.

It has opened up a new field for further work of this kind. We are starting now on our plans for next year's night school work.

Results From One Evening School

MR. W. S. BALDWIN, Tennessee Master Teacher for 1929, taught 128 farmers during that year in evening classes. Following instruction thus received these farmers terraced 214 acres of eroding land; applied 535 $\frac{3}{4}$ tons of ground limestone on their farms; home mixed and applied 112,400 pounds of fertilizer on 374.6 acres of land; increased their livestock by 65 head; sowed successfully 44 $\frac{3}{4}$ acres of alfalfa; 70 acres of red clover; 33 acres of vetch; and 36 $\frac{3}{4}$ acres of crimson clover; and improved 50 acres of permanent pasture. The value of these improved practices to date amounts to \$16,906. —Adapted from article by D. M. Clements, State Supervisor, Tennessee, in *The Progressive Farmer*.

Evening Class Size

The idea that a large group is necessary for a successful evening school has been proven erroneous. The most successful work has been done with groups of from twenty to thirty-five interested adult farmers.



The Solomon Semi-Portable Tool Cabinet

B. J. CONROY, Teacher of Agriculture, Solomon, Kansas

WHEN the vocational agriculture work was introduced last year in the Solomon Rural High School each boy enrolled was expected to equip himself with a claw hammer, carpenter square, and a crosscut saw. If he was not enough interested to furnish these essential tools it was concluded that he was not sufficiently interested in the work and was discouraged from taking the vocational agriculture course.

After 30 vocational agriculture boys enrolled and had furnished the minimum tool requirement, the problem of properly caring for the tools immediately arose. It was then decided that each boy should build a cabinet to hold the more common farm tools.

The following are merits of the cabinet built by the vocational classes:

1. Keeps the tools in an orderly manner and more accessible.
2. Gives the vocational boy a pride and responsibility in caring for his tools.
3. Is made strong enough to stand much abuse.
4. Is portable so that it may be taken with the tools in it to the job, thereby avoiding the piling of edged tools and also the necessity of returning to the shop for tools.
5. Large enough to hold the tools of the average farmer.
6. The tools can be kept under lock and key.
7. Costs only \$2 complete.
8. The absence of tools can be quickly detected as a definite place within the cabinet is set aside for each.

9. Protects the tools from weather and rust.

10. Can be easily converted into a wall cabinet.

From the teacher's standpoint it has many advantages. It provides experience in the following activities:

1. Planning the size and shape of cabinet necessary to house the more common farm tools.

2. Sketching and drawing: the framing section, side view, end and perspective view.

3. Working out a bill of material.

4. Selecting and buying lumber and hardware.

5. Planing and squaring lumber.

6. Mortising and fitting joints.

7. Boring and countersinking.

8. Making a box absolutely square.

9. Planing, scraping, and sandpapering in finish work.

10. Hanging a door.

11. Arranging tools in cabinet.

12. Staining, painting, and varnishing, first and second coats.

13. Filling countersunk holes and cracks with crack filler or putty.

The cabinet is one of the first-year jobs and at the close of the school year each boy is permitted to take his cabinet home. He is encouraged to hang it in a place where he can keep tools protected for his own use. Also, each boy is encouraged during his two years in the course to equip the cabinet with a collection of tools that will be useful when he starts his own farming operations.

Bill of Materials

No.	Size and Kind	Purpose
1	1'x10'x5' long.....	Back
1	1'x8'x10' long.....	Sides and End
1	1'x6'x10' (Car Siding).....	Door
1	2'x2'x3' long.....	Cleats on door
2	2 1/2" butt hinges.....	Door
1	3" Hasp.....	Door
1	6" Handle (Barn Door).....	Carry Cabinet Construction
70	1 1/4" No. 8 Screws.....	
1	Pint Varnish.....	Outside coat
1	Pint Black Enamel.....	Inside coat
	Crack filler or white lead putty.....	To fill countersunk holes

Order in the Farm Shop

THE average farm shop teacher is a poor housekeeper. The greatest outstanding opportunity for improvement in the farm shop work as a whole is in organization and orderliness of the supplies, tools, and equipment of the shop.

Many instructors overlook the teaching value of a place for everything and everything in its place. If the boy is taught, by example, careless and unsystematic methods in the school shop, he will carry those methods into his own farm shop at home.

The writer was pleased to visit an orderly shop recently. Among other commendable features was a row of boxes along one wall for scraps of wood. Above each box was a neatly lettered cardboard which stated the specifications of the scraps to be placed in each box. The results are that all the scraps are properly classified as to size and dimensions.

In one corner was a tier of shelves for cans of paint. On each shelf was lettered the kind of paint which belonged on that shelf. Instead of the paint department of the shop creating the usual eyesore it detracted in no way from the attractive appearance. These are two of several features which made this shop outstanding for its neatness and orderliness.

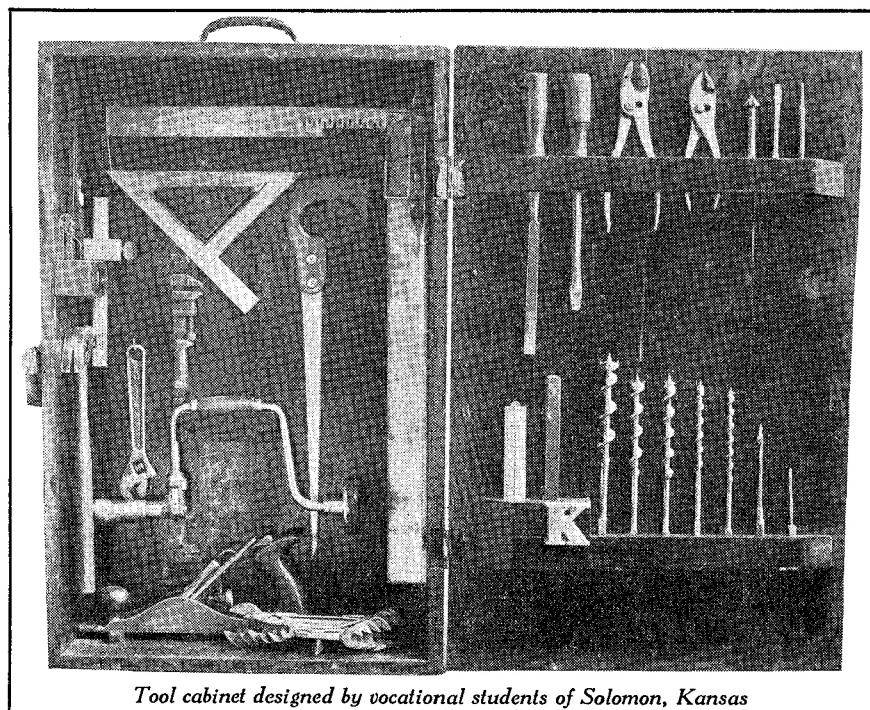
A disorderly shop is inexcusable—let us improve our housekeeping.—Colorado News Letter.

Stencils for Shop Jobs

Stenciling the name of the school department on the various construction jobs completed in the farm shop advertises vocational agriculture. The best stencil is one cut from a sheet of thin brass; cardboard may also be used, but of course does not last long.

Shop Window Guards

Where shop windows have been placed too low to the floor and tools from benches are sometimes pushed thru the windowpanes, a heavy wire screen guard across the window just above the benches prevents such accidents.



Tool cabinet designed by vocational students of Solomon, Kansas

Farm Mechanics Contests

M. F. THURMOND, Professor of Agricultural Engineering, Texas A. & M. College

THERE was a time, only a few years back, when we thought that the only kind of a contest that could be conducted in the agriculture course was one in livestock. In the spring of 1929 in Texas there were 404 teams representing livestock, poultry, dairying, entomology, plant production, and farm mechanics. Some of these teams are located over 1,000 miles apart and a number of them came 650 miles to the contest.

Our farm mechanics contest is now six years old. It has grown from 44 contestants in 1925 to 184 in 1929, and the workmanship shown by the contestants has improved from year to year.

The first shop contest in 1925 was conducted thru the agricultural engineering department. The work consisted of soldering, concrete work, rafter cutting, and Ford work. In spite of the small amount of equipment with which to work, the contest went over very successfully.

In 1927 the teachers met and decided to expand the contest, putting in saw filing and identification of hardware in addition to the other four contests, and requiring all teams entering the contest to compete in all events. This meant that a team must be well trained in all events to win.

In 1928 the contest had grown to 42 teams. The work for that year was as follows:

- (1) Soldering;
- (2) Individual work in concrete;
- (3) Team work in concrete;
- (4) Identification of hardware;
- (5) Rafter cutting;
- (6) Identification of Ford parts;
- (7) Saw filing;
- (8) Ford work by teams.

This contest proved to be too long. In view of this fact and that the model T Ford had passed into history, and other light car dealers objected to what is known as "Ford work" in our course of study it was decided to omit the automobile work for 1929.

The 1929 Contest

There were 46 teams that entered; these were divided into six groups of 23 each. No two boys from the same team being in the same group. The contests to be entered were as follows:

- (1) Individual work in judging sand and gravel;
- (2) Team work in making a concrete slab;
- (3) Individual work in soldering;
- (4) Individual work in saw filing;
- (5) Individual work in identification of hardware;
- (6) Individual work in rafter cutting.

In judging the sand and gravel four boxes of sand and four boxes of gravel were placed on a table and numbered. These materials were to be placed in order as to value for farm concrete work. In addition to placing the sand and gravel, each boy was given a blank to fill in giving the proper mixtures for the construction of such jobs as sidewalks, fence posts, barn floors, etc. They also checked drawings, showing the proper and improper placing of reinforcing. One problem was given on estimating

materials for a given job. The contestants were not graded on time, but were allowed 30 minutes to complete the work.

The team work in concrete was done after all individual work was completed. It consisted of constructing a concrete slab 18 x 24 x 4 inches—this being one cubic foot, using a given mixture. A measuring box, shovels, mixing board, and all necessary equipment were furnished the teams. Seven teams competed at one time and all of them were graded by three judges. One judge graded on (1) the method of mixing, (2) the texture of the concrete, (3) method of placing the concrete. Another judge graded on (1) workmanship as shown by the finished slab, (2) the amount of mortar left on the mixing board, (3) the additional materials needed to finish the slab. The third judge graded on (1) time, (2) and the use of the tools. The three judges then totaled their grades for the team score.

Soldering Good

Soldering is regarded as one of the best contests in shop work. It tests the boy's skill as well as his knowledge of metals and proper fluxes. In this contest each boy was given instructions for making a funnel. Due to the lack of time it was necessary to mark with a pattern the outline of the funnel. To make the contest more difficult, different kinds of metals were used in making the cone part of the funnel and the spout. The soldering coppers were ground off ready for tinning, and 45 minutes were allowed to complete the job. Premium was given for speed.

The identification of hardware was based on materials commonly used by farmers. Such articles as nails, bolts, screws, tools for the shop, plumbing fittings, and other tools were tagged, numbered and placed on a large table. The teachers were sent a list of several hundred articles several weeks before the contest to train their teams. The articles used in the contest were taken from this list.

If there is any one thing that the boys need to know more about it is hardware on the farm. The papers showed grades from 18 to 85 percent. The average for the contest was about 68 percent. There was no premium given on time in this contest but 30 minutes were allowed to complete the work in identifying 40 articles.

In saw filing, practice strips were furnished by E. C. Atkins & Company. These strips have the teeth cut on one edge for a rip saw and on the other for a cross-cut saw. Each contestant set and filed two inches of each kind of teeth. Thirty minutes were allowed for the contest and each contestant was graded on time.

The judging in saw filing was based on a properly fitted saw and was graded on the set of the teeth, sharpness, angle and uniformity of the teeth. Judging was not so difficult as the good work showed up well. This contest is regarded by the teachers as not only interesting for the boys but very essential as a part of the shop course.

To be able to cut rafters for different types of roofs, with different pitches, is a problem that many carpenters have found difficult. In the rafter cutting contest we have held to only two types of rafters, gable roof and shed roof. Each boy was given an instruction sheet, and using a piece of 2 x 4 cut out the two rafters as called for. Forty-five minutes were allowed to cut the rafters and they were graded on a time basis. A frame was built and set up on saw horses for each type of roof. When the boy finished cutting his rafters he then nailed them up in proper place. This enabled the boy to check on himself and compare his work with the other contestants. This contest is especially interesting to the spectators as they can see both the good and poor work. Some rafters are too short, others are too long, and some have used the wrong pitch.

The rafters are judged by the use of a pattern on the basis of correct length, seat cut, ridge cut, overhang, and time.

For the winners of the contest a trophy is awarded; a cup is also awarded to the winners in each event. In addition to these trophies prizes were given by several commercial firms. All the companies were glad to co-operate with us in putting over the contest and we used a number of their representatives to assist in judging the work.

This year for the first time we were able to give each teacher a complete record of all grades of his team when the results were announced. Each boy knew exactly his standing and the grade he made in each event.

Improvement Made

An effort is being made thru the agricultural engineering department to improve the work in the farm mechanics contest and at the same time render service to the vocational agriculture teachers over the state. This is being done by sending out information on the contest subjects. Type problems are sent out in rafter cutting, information on concrete work, soldering, and pointers on training teams are included. By this means we are making contact with the teachers and getting their co-operation.

I believe the time has come when we should get together and decide on certain shop contests that can be made national just as the livestock contest is being held for the state winners.

Plans for a modern farm shop and machinery shed may be found on page 19 of the December issue of the Farm Mechanics magazine.

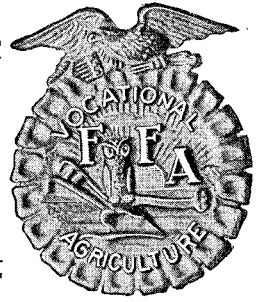
A stiff wire brush for cleaning all sizes and shapes of files added to your tool cabinet will help to keep the files in shape and lengthen the life of such tools.

Instructions for fitting pistons and piston rings will be found on page 23 of the December issue of the Farm Mechanics magazine.

Half a small barrel makes a splendid and inexpensive cooling tub for farm blacksmithing.



Future Farmers of America



F. F. A. Has Wonderful First Year Record

HENRY C. GROSECLOSE, Executive Secretary-Treasurer, shows progress in report given at the Second Annual Congress

DURING the first twelve months of the life of the Future Farmers organization 35 state organizations have affiliated themselves with the Future Farmers of America. Several other states have organized and are contemplating affiliation within the next few months. The geographical scope of the organization can be visualized to some extent when I tell you that a glance at a map of the United States shows such states as New Jersey and Oregon members of this young Future Farmer movement. Boys from California and South Carolina meet here at the national congress and discuss problems in common. Boys from New York state and boys from Florida are here as qualified delegates representing their state organizations.

This report is supposed to be a summarization of the annual reports from chartered states. Unfortunately, all states have not sent in annual reports. The totals, therefore, will be lower than the actual numbers in all cases.

The following states have affiliated themselves with the national organization:

Virginia, Arkansas, New Jersey, California, South Carolina, Nebraska, Oklahoma, Wyoming, Maryland, Georgia, Nevada, West Virginia, the Territory of Hawaii, Ohio, Colorado, Kansas, Idaho, North Carolina, Indiana, Utah, Illinois, Iowa, Wisconsin, New York, New Mexico, Pennsylvania, Tennessee, Missouri, Michigan, North Dakota, Florida, South Dakota, Arizona, Texas, and Oregon.

From the few annual reports which I have received from states I gather that there are approximately 1,500 chapters of Future Farmers of America. The reports that I have received indicate only 1,118, but these represent only about 55 percent of the states. Twenty states report 19,353 members. This would indicate that the membership is now approximately 30,000. This membership will be materially increased during the current school year. I say this because supervisors of agricultural education are constantly writing me and reporting increases in membership. The state of Illinois, alone, will have a paid-up membership of 4,000 this year. The growth of the organization has been very gratifying during the first 12 months of its existence.

The fact that there has been such a tremendous growth shows that there was a need for such an organization. I have letters on file from state directors,

state supervisors, teacher trainers, instructors and students of vocational agriculture certifying to the worthwhileness of the Future Farmer movement. Some men of good judgment go so far as to say that this organization is doing more to motivate good work on the part of students and teachers than any other device that we now have. There is a tremendous amount of enthusiasm in the United States which is being crystallized and used thru the directed activities of the Future Farmers of America.

Only six states report regarding thrift work in chapters. These states, however, report \$303,066.19 in savings accounts, \$362,715.15 invested in farming, \$117,567.84 invested in stocks, bonds, and so forth, and \$9,311.34 in checking accounts. Thus we see that the six states that report their thrift club work have a total in savings and investments of \$792,661.52.

You may be interested to know that national recognition is now being sought at the hands of the Congress of the United States. A bill known as Senate Bill 2113 was introduced into the United States Senate by Senator Smith of South Carolina on November 14. This Bill has for its purpose the granting of a federal charter to the Future Farmers of America. The Bill has been referred to the committee on agriculture in the Senate. Nothing has been done about this Bill in the House, because the House has not been in session as you know. It is my honest conviction that the Congress of the United States will place its stamp of approval upon this boys' organization in this way. This federal charter will not be obtained without a considerable amount of effort, however. The American Bar Association has been trying to obtain a federal charter for about seven years and without satisfactory results. The Congress is pretty well sold to the idea that no more federal charters will be issued to corporations and organizations for the sake of mere prestige. If it can be proven, however, that the Future Farmers of America is an organization which is effectually aiding in the carrying out of the spirit of the federal laws for the promotion of vocational agriculture, the Congress will, in all probability, grant a charter at the present session of Congress.

Among the projects that the national organization is sponsoring during the current year, a handbook or manual is perhaps as important as anything else.

The material for this manual has been assembled and after careful revision of the material a manual will be printed which will make for uniformity all over the country, so far as ritual, constitution and by-laws, colors, and the like are concerned. Two publishers of agricultural magazines have asked to be allowed to publish a national magazine for boys to be known as the "Future Farmer Magazine." While we believe that a national magazine is a thing greatly to be desired there is no tendency on the part of the board of trustees to rush headlong into such a project. This matter, however, will probably be settled at the next annual congress.

Some of the things that the Future Farmers are trying to do involve the expenditure of money. The budget committee has indorsed a budget which calls for the expenditure of \$4,100 for the current year. While this amount may appear excessive, it is pitifully small when we consider the vast expenditure of funds being made by such organizations as the 4-H Club, the Boy Scouts of America and so forth. Some of the individual state organizations have a Future Farmer budget almost as large as the national budget. If the work of the organization is to be carried out and the recommendations of the committee on program of work are to be followed, it will be necessary for us to have at least 41,000 paid-up members during the current school session.

The most encouraging thing about this young organization is the recent development of leadership on the part of the boy and the boy officers. All signs point to the fact that the membership of the Future Farmers of America, with the advice of teachers or state administrators, is able to steer this organization along the path that looks to a broader view of rural life, and increased ability to carry the burdens of rural leadership, as well as increased efficiency in farming. Last, but not least, the warm spirit of co-operation engendered by members of this organization will, I believe, lead to more hearty co-operation in adult life.

Iowa Future Farmers

The February number of The Iowa Future Farmer was devoted to suggestions for programs of work. It is a mimeographed booklet edited and published by the Agricultural Education Club of Iowa State College.

Future Farmer Songs

TWO splendid songs are now available for use by Future Farmers of America.

Mr. E. M. Tiffany, formerly professor of agricultural education at the University of Wisconsin, and Professor V. E. Kivlin of the same department, have collaborated in producing the words and music for "The Song of the Future Farmer." Both words and melody are inspiring. The songs may be secured from Professor Kivlin at 15 cents a copy.

The other song, "Future Farmers of America," is written to the tune of "On Wisconsin." The words were composed however, by J. W. Duck, vocational agriculture teacher at Neosho, Missouri. The tune is easy to carry and the words tell the story in one verse. The song has been mimeographed by the Department of Agricultural Education, Columbia, Missouri, and may be secured at \$1 per hundred copies.

Both of these songs are splendid for F. F. A. meetings, father and son banquets, and other public occasions where the vocational boys wish it known that they are present.

Co-operative Financing

The Newton, New Jersey, F. F. A. Chapter has organized a Future Farmer Co-operative Association. The group visited a local bank where the president of the association made a request for financing their proposition. The vice-president of the bank told the boys the requirements for credit and explained the steps they should take for their own safety and that of the bank.

How's this for learning to co-operate?

Monthly Bulletin List

In order to keep in touch with all experiment station bulletins as issued, each vocational teacher should receive the List of Station Publications from the U. S. D. A. Write the Office of Experiment Stations, Washington, D. C., and ask to be placed on the mailing list for this service.

Master Vocational Students of the Lone Star State



H. C. Claunch



Harold Strother

ONE of the reasons for printing the above pictures is to illustrate the fine type of boys who are making the bid for leadership in vocational agriculture.

H. C. Claunch of Silverton, Texas, was the state winner in the Master Vocational Agriculture Pupil contest sponsored in Texas by *The Progressive Farmer*. As the high ranking vocational student of Texas, he received the \$100 award and a free trip to the Master Farmer banquet at Dallas.

Harold Strother, of Mt. Pleasant, is one of the five district winners in the same contest. He received \$50 and a trip to the Dallas banquet. Harold is also state president of the Future Farmers of America.

The following score card was used as a basis for the selection in this contest:

	Points
I. <i>Farming status</i>	20
1. Kind and scope of enterprise	6
2. Managerial responsibility	8
3. Working capital and equipment available	6
II. <i>Ability to farm</i>	30
1. Accomplishments in home projects	20
2. Other farming experience	10
III. <i>Earnings and investments</i> ..	20
1. Earnings from farming ..	15
2. Investments in farming ..	5
IV. <i>Ability to work with others</i> ..	10
V. <i>Leadership</i>	10
VI. <i>Scholarship</i>	10
Total	100

F. F. A. Speaking Contest

A NATIONAL public speaking contest for members of the F. F. A. will be held in connection with the National Congress of Vocational Agricultural Students at Kansas City, Missouri, November, 1930. This contest has been approved by the National F. F. A. organization and the Agricultural Section of the American Vocational Association.

The contest is made possible thru the kindly interest and generosity of Senator Arthur Capper. As owner and publisher of the Capper Publications, Senator Capper will provide appropriate prizes and defray participation expenses of four boys, one from each of the regions designated by the Federal Board for Vocational Education.

Elimination contests will first be held in the states where the F. F. A. is organized. Winning orators in these state contests will be sent to regional contests and the winners in these regional contests will compete at Kansas City in the national contest.

Prizes in the national contest will be awarded as follows: First, \$500; second, \$300; third, \$200; fourth, \$100. Travel and subsistence from their homes to Kansas City and return will be allowed the four contestants.

The subjects of the orations must deal with some phase of agriculture. The following are suggestive:

1. "What the F. F. A. May Mean to American Agriculture."
 2. "The Relation of the Farmer to the Success of the Federal Farm Board."
 3. "Co-operative Marketing as a Solution of Farm Problems."
 4. "The Opportunities for and Limitations of Corporation Farming."
 5. "What My Home Project Work in Vocational Agriculture Has Taught Me About Farm Operation and Management."
 6. "Equalization of Taxes as a Farm Relief Measure."
 7. "The Machine Age and Its Effect on American Agriculture."
 8. "The Value of the Federal Farm Loan System to the American Farmer."
- Local advisers should write their state supervisor of agriculture for information about state and regional contests.

Program of Work, National Chapter of Future Farmers of America

Adopted Tuesday, November 19, 1929, at Kansas City, Missouri, by the Second Annual Congress

1. Encourage and help unorganized and recently organized states perfect state organizations.
2. Have every state in the union become affiliated with the National Chapter of F. F. A. and charters granted to them.
3. Encourage and promote a national oratorical contest at the annual congress of Future Farmers.
4. Encourage and foster national judging contests, such as dairy, fat stock, poultry, fruit, and grain.
5. Encourage each state to publish a periodical and exchange these with other states. These should be published at least quarterly.
6. Work out a ritual for use in local, state, and national chapters, and have the executive secretary send such information out.
7. Provide thru the National Congress of Vocational Agricultural Students larger opportunities for the development of leadership and for giving national recognition to the outstanding achievements of the Future Farmers of the different states according to the qualifications set up in the constitution.
8. Have at least 85 percent of state chapters with thrift clubs.
9. Provide, thru the National Congress of Vocational Agricultural Students, awards and prizes to be awarded at the American Royal Livestock and Horse Show for work in vocational agriculture.
10. Encourage and foster within the state chapters interscholastic athletic contests.
11. Publish a national handbook.
12. Encourage each state to stage co-operative movements among its local chapters.
13. Encourage all the state chapters to have state exhibits at the different national judging contests, and American Royal Livestock and Horse Show.
14. Each state should provide some state-wide recreational activity.
15. Have each state chapter foster a movement whereby all vocational agriculture students make it their duty to help better the conditions around the farm.
16. Have at least 50 candidates for the American Farmer degree from the various states at the Third Annual Congress in November, 1930.

The Speaking Contest for Young Farmers in New York

Leadership Training for Large Group the Main Objective

W. J. Weaver, Asst. State Supervisor, New York

SINCE the speaking contest for members of F. F. A. has been extended on a national basis, F. F. A. chapter advisers in other states may be interested in the manner that the Association of Young Farmers of New York has organized this contest in the past and how it plans to work in with the national event.

Our speaking contest for young farmers has been in progress during the past three years and has been one of the most important features that the Association of Young Farmers of New York has promoted in its contribution to future agricultural leadership. We will need to make but little change in our organization to fit in with the plan of the national contest. Our chief changes will rather be prompted by the necessity of keeping up with our constantly increasing interest among local chapters.

We believe that state and national contests of any sort are only valuable as they contribute to the stimulation of activity in desirable lines among a large number of people. The speaking contest is no exception. Our ultimate goal is that of participation by every member of every local chapter, at least during his last two years in school, in preparing his talk and becoming a competitor in the school contest.

When the speaking contest started with us in 1927, only 17 chapters took part. The number increased to 25 the second year and to 40 the third. For the 1930 event it is expected that every strong active chapter in the state will take part.

Starting with the local chapter, each member of the upper classes prepares his own talk and memorizes it. The first elimination is held before a meeting of the Young Farmers group, the boys themselves deciding the four or five who shall go on. The next appearance is before the high school assembly or before some other local group such as a grange or local farm bureau meeting where two winners are selected. These two again appear before some other service group of the community where they are rated, one as the member to represent the chapter in the sectional contest and the other as alternate.

The next step is the sectional contest. These are arranged by the chapter adviser and the state adviser and as far as possible are held in connection with a district meeting of some state-wide farmers organization.

Three years' experience has shown that five or six contestants with seven to ten-minute talks each, furnish as long a program as is desirable at any such meeting. For the past three years seven of these sectional eliminations have been held and the winner of each of the seven sections has taken part in the final contest.

Due to the greatly increased interest a further meet between sections is planned for this year. It is the plan to have 10 sectional eliminations and then

to bring the winners of each two sections together at a convenient point and to select one lad from each of these five larger regions to make up the five who will compete in the final contest.

The final contest will be held at the New York State Fair in September as a part of the Young Farmers program that is arranged and the winner here will go on to the North Atlantic Regional Contest wherever it may be held and of course we hope on further to the National Contest at Kansas City.

The only matter of finance involved in carrying out this speaking contest program, outside of small prizes which local organizations may volunteer to give, is the sum of \$200 provided by the state fair. For 1930, this will be divided into 10 prizes: \$60 for the winner to enable him to pay his expenses if necessary to the North Atlantic Regional contest; \$30 for the alternate; three prizes of \$20 each for the other three lads who take part in the state final event, and five prizes of \$10 each for the remaining five lads who were winners in their respective sectional contests.

We are mindful of the excellent training which a few boys receive thru the state contest and we can appreciate the further extension of this thru the national contest, but we are firm in the belief that our greatest benefits are derived from the stimulation of the activity on the part of the first great group of 500 who take part in the preparation of talks on live agricultural subjects and then deliver these talks before interested groups back in the home communities.

FUNDAMENTAL PRINCIPLES

The Future Farmers of America as an organization of farm boys studying vocational agriculture will be successful and permanent only in so far as the following fundamental principles are accepted and put into practice:

There must be maximum participation on the part of the boys in the affairs of the organization.

There must be an intelligent direction of this participation by mature and unselfishly interested persons.

Farm Journal Continues Prizes for Outstanding Chapters

THE Farm Journal of Philadelphia again offers \$1,000 in prizes to be awarded next November at the National Congress of Vocational Agricultural Students at Kansas City to the most outstanding local chapters of the Future Farmers of America.

To be eligible, a chapter must have completed at least one year of work by Wednesday, October 1, 1930. The winners are to be selected on the basis of achievement as revealed in reports approved by the state supervisor of agriculture. The \$1,000 will be awarded as follows: First prize, \$500; second prize, \$300; third prize, \$200.

Chapter advisers should write at once to The Farm Journal, Washington Square, Philadelphia, for a copy of the rules and regulations and the report blank that is to be filled out and sent to this farm paper at the close of the contest which is midnight, Wednesday, October 1, 1930. Competing chapters are also asked to submit copies of their programs of work not later than April 1, 1930.

The score card on which the chapters will be judged includes eight items as follows: Supervised Practice, Co-operative Activities, Community Service, Leadership Activities, Earnings and Savings, Conduct of Meetings, Scholarship, and Recreation. A complete explanation of these items is given in the rules and regulations.

Now is the time for chapter advisers to get data ready to submit later. This contest is worthy of our best efforts. Competition will be keen. May the best chapters win.

Proud of Membership in F. F. A.

THE boys in the agricultural department of the Salem, New Jersey, high school are very proud of the accomplishments of their Future Farmer Association, and rightly so for they have made an enviable record in state and national competition.

Foremost of their accomplishments during the past year was placing three boys on the team that represented the state of New Jersey at the National Dairy Show. This is not the first time that all three boys to represent a state at the National have been from the same school, but it is believed that this is the first time that it has happened in individual competition. The boys selected ranked first, second, and third after eight state-wide elimination contests in which they judged over fifty rings of cattle.

But that is not the only reason the boys feel proud of their F. F. A. Two of the 10 State Farmer keys were won by Salem boys, and one boy was honored with the vice-presidency in the state organization. The chapter also edited a 32-page mimeographed bulletin of the activities of the department. Over one hundred guests were entertained at their Parents' Night Meeting last fall. Every family was represented either by a father, mother, or guardian.

To say that they are proud of their organization is not saying all, because every boy is proud to be a member of the organization. The privilege of membership comes only after fulfilling all obligations of the organization and it is this point that the instructor feels has made the Salem F. F. A. a potent factor in building the agricultural department and in making the boys better future farmer citizens.—W. H. Evans, Teacher of Agriculture, Salem, New Jersey.

A Program of Work for Local Chapters

THE success of F. F. A. work in local chapters depends largely on having a good program of work and in carrying out the objectives of this program. The following came to the attention of the editor recently. How do you chapter advisers like it? Is yours any better?

OBJECTIVES FOR YEAR 1929-1930
(—) Chapter,

Future Farmers of America

I. Supervised Practice:

- (a) Individual efforts toward successful projects.
- (b) Adopt standards for different projects.
- (c) Boost supervised practice work as an organization.
- (d) Conduct project inspection tour in June.

II. Co-operative Activities:

- (a) Organize a Future Farmers Co-operative Association with staff of officers having regular office hours each week.
 1. The organization to handle the selling of certified seed potatoes in carload lots for use of pupils and potato growers.
 2. The organization to promote and assist in buying of any other materials needed by members and also in the co-operative selling of project products under a brand.
 3. Earnings of the organization to be used for educational trip.

III. Community Services:

- (a) Continue the work of beautification of school grounds.
 1. Two groups of shrubs to be added in fall.
 2. A rock garden and group of evergreens added in spring.
- (b) Improve farm practices in the community by—
 1. Promoting the use of certified seed.
 2. Practicing and promoting cow testing work, farm records, better breeding practices, etc.
 3. Co-operating with the extension department, both senior and junior, in demonstrations, tours, exhibits, etc.
- (c) Entertain alumni and former students at the school.
- (d) Hold Father, Mother, and Son Banquet in May.
- (e) Entertain rural school boys in the spring.

IV. Leadership Activities:

- (a) Conduct program contest to be judged by three competent judges. Chapter has been divided into five groups of four boys each and each group is to present a program at one of the monthly evening meetings.
- (b) Aim at regular attendance and better participation in meetings, all officers fulfilling their duties.
- (c) Secure business experience in connection with the co-operative association.
- (d) Participate in other school activities—business, social, and athletic.
- (e) Promote vocational agriculture by being willing to speak before rural schools, assembly periods and other meetings.

V. Earnings and Savings:

- (a) Promote bank deposits. One hundred percent of members with bank accounts.
- (b) Promote buying of life insurance, building and loan stock, and other wise investments.

VI. Conduct of Meetings:

- (a) Become familiar with ritual for opening and closing meetings and initiating candidates.
- (b) Promote interesting programs by means of the program contest and in other ways.

VII. Scholarship:

- (a) Encourage one another toward higher standards of work.
- (b) Work toward more flexible curricula for vocational group.

VIII. Recreation:

- (a) Play basketball every Friday noon in winter season.
- (b) Play baseball and quirts during spring and summer months.
- (c) Promote picnics, etc., when feasible.

TEACHERS ATTENTION

Please send articles about F. F. A. work in your local chapters to H. O. Sampson, College of Agriculture, New Brunswick, New Jersey, who is special editor of the F. F. A. section of **AGRICULTURAL EDUCATION**. It is our purpose to publish articles that will be of help in promoting the work in local chapters and we cannot tell what is happening thruout the country unless you tell us what is happening in your school.

A New Idea Then

THE personal interest basis of teaching agriculture is more productive of real achievement than any other method that has been used. By this method boys deal with the practical problems of the farm on the basis of their own personal interests. . . . To each boy the question is 'How shall I select *my* seed corn, raise *my* pigs.' . . . The answer to the specific question is not found by the reading and recitation method but by actual demonstration by the boy. The demonstration is not made in the school laboratory, but in the home field, the home feed-lot. The problems are not devised, but they are those which arise in the daily experience of the boy as the regular routine of farm work is being performed. . . . In order that the work may be done as a practical problem, it must be continued during the summer, and to insure proper direction and supervision of each project, the teacher must at frequent and regular intervals visit the boy while at work."—Z. M. Smith (1916).

A TOAST

Here's to the boys who left the farm
And out in the big, wide world today
Are winning their way;
But here's to the boys who list to the
charm
Of fresh-plowed fields and new-mown
hay.
Here's to the boys who stay.
—E. E. Elliot.

Judges' Score Card for Speaking Contest

THE following score card and explanations have been received from the National office. This material should be of value to F. F. A. advisers and to students entering the contest:

SCORE CARD

I. For Scoring Content and Composition

Items to Be Scored	Points Allowed
1. Content of the manuscript. . . .	25
2. Composition of the manuscript	20
3. Appearance of the manuscript.	5

Score on written production. . . . 50

II. For Scoring Delivery

Items to Be Scored	Points Allowed
1. Voice	10
2. Stage presence	10
3. Power of expression.	15
4. Response to questions.	10
5. General effect	5

Score on delivery. 50

III. For Computing the Score of the Contest

Items Included	Points Allowed
1. Score on written production. . . .	50
2. Score on delivery.	50

Totals 100

Less overtime deductions for each minute 2

Explanation of Score Card Points

I. CONTENTS AND COMPOSITION

1. Content of manuscript includes: Importance and appropriateness of subject; Suitability of material; Accuracy of statements; Evidence of purpose.
2. Composition of manuscript includes: Organization of content; Unity of thought; Logical development; Conclusions — accomplishment of purpose; Language used; Sentence structure.
3. Appearance of manuscript includes: Legibility; Neatness; General appearance.

II. DELIVERY

1. Voice includes: Quality; Pitch; Force; Articulation; Pronunciation.
2. Stage presence includes: Personal appearance; Body posture and poise; Ease and relaxation; Confidence; Attitude toward audience; Personality.
3. Power of expression includes: Sincerity; Fluency; Directness; Emphasis; Communicative activity; Conveyance of thought and meaning.
4. Response to questions includes: Ability to satisfactorily answer questions on the production as asked by judges.
5. General effect includes: Convincing; Interesting; Understandable; Pleasing; Holds audience.

Agricultural Education Through Exhibits

A. H. BATEMAN, Teacher of Agriculture, Idaho Falls, Idaho

THE Idaho Falls Future Farmer instruction booth proved to be a popular display at the East Idaho District Fair held at Blackfoot, Idaho. Large crowds were continuously at the booth and the exhibit received praise from many sources. The Idaho Falls Times-Register stated "It was a wonderful exhibit with a great deal of educational value."

The purpose of the instruction booth was to emphasize the value of systematic instruction of vocational agriculture in creating an efficient and satisfying farm life. The exhibit showed what a model Idaho farm should look like and what it can grow. It pointed the way to improved farm practices which result in better living and greater satisfaction on the farms.

The exhibit compartments or shelves at the sides and back of the booth held specimens of seeds, fruits, and vegetables which might be produced on such a farm. On the center of the wall at the back was a sign, "Idaho Falls Future Farmers." Arranged on the back walls were sheaf grains, sheaf alfalfa, and clover. Here a diversified system of farm crops was emphasized as opposed to the one-crop system which has been so disastrous to many farmers.

The planning and organization of the exhibit was made a part of the class instruction. The students were made

to feel that preparing an agricultural display is an instructive and worthwhile project. Before the actual work began on the preparation of the exhibit all details were carefully worked out by discussion, study, and demonstration. The exhibit, including arrangement, crop or farm produce, and materials for the farmstead was definitely planned before the work was begun. This was done after study and discussion by 102 farm boys taking vocational agriculture

present. The main points considered are:

1. Does the caption tell what the exhibit is about and suggest the message presented in the exhibit?

2. To what extent has the exhibit an unusual or special attention-getting feature to attract the attention of a large number of people?

3. Is it interesting to a relatively large number of farm people because it relates to a practical problem, and is easy to follow and understand the

material and facts presented so that one is willing to read or look through all material and facts presented?

4. Does it make one conscious that he needs this remedy and does it make him want to have the resulting benefits, such as increased profits, comforts, or conveniences which can be expected from adopting the recommended practice.

5. Does it set forth the best

means for adopting this practice and make one decide that he wants to take the trouble to adopt the practice because he is convinced that it is worth while or that it will pay by showing the possible gain, low cost, and ease of adoption?

6. Are maps or other means used to show that the remedy presented has been both successfully and extensively used in the county represented?

7. Does the exhibit impress you favorably by being well arranged, neat, and artistic?

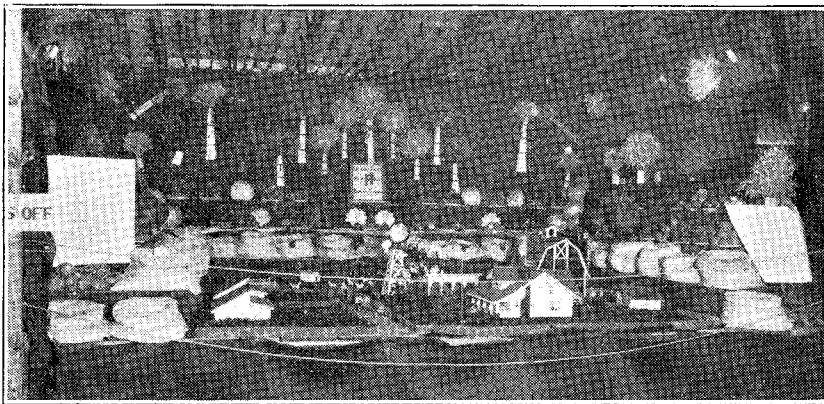


Exhibit planned and set up by Vocational Agriculture students of Idaho Falls, Idaho

in the Idaho Falls high school. The exhibits were brought into the classroom from the farms of the boys and were prepared during the regular class period. Several of the senior students were responsible for putting the exhibit up at the fair.

The following suggestions were taken from the 1927 Yearbook, page 286, written by Gilbertson, given under the title, "Judging Project Exhibits." "Project exhibits are judged by how forcefully they tell the story they are intended to

the county agricultural agent. The hardness of the task is mentioned, not to frighten the teacher, or even to cause him to watch his step, but rather as an introduction to a method of solving his problem, and making him happy through success."—From Galpin's "Rural Social Problems."

The establishment or improvement of the home farm shop should result from good farm mechanics instruction.

The project should be utilized as much for the acquisition of knowledge as for its application.

Good method is as important in evening course work as it is with the high school group.

Good notebooks are a valuable device in learning.

Above everything else, our students should be taught to reason intelligently.

Survey Best Approach

THE animal husbandry class has been studying "Poultry" these past two or three weeks. Each student first made a survey of poultry conditions at home including a check-up on the number of hens, pullets, cockerels, roosters, size of range, egg production, health and vitality, and amount and kind of feed fed daily. Front, back, end, and cross-sectional views of the home poultry house were sketched in the notebooks along with the above facts.

With this data in his possession the student is ready for his first lesson. The University of Illinois recommendations for feeding and management are then studied and written in the notebooks. Two days were spent in visiting good poultry houses in the village. The 20 by 20-foot University of Illinois laying house plans were carefully drawn and the cost of materials figured. Some members of the class expressed a desire to make a model house (miniature). With this information at hand each student formulated plans for correcting conditions at home. The probable cost of materials was carefully figured. Adequate space was left for practices actu-

ally improved by the student.—I. E. Parett, Saunemin, Illinois.

"It's a Big Job"

THE Smith-Hughes teachers of agriculture, so-called, while occupying strategic places in the nation for assisting agriculture and farm life, have by no means a rosy path of duty. They need to be specially fortified with wisdom and common sense and human understanding, over and above their technical training. To teach in high school sons of farmers how to farm when the sons go home every night where the struggle to farm is the bread-and-butter struggle of life, is a very ticklish procedure. It is teaching on the front line under fire. It is far easier to teach in the agricultural college, a hundred miles away from the farm. It is easier by far to make a one-night stand of teaching in a farm-extension school and then beat a retreat to the college of agriculture or go to some other community. The Smith-Hughes teacher must face every day those whose farm practices he is trying to improve, and must live with them day by day. He has fewer means of escape, even, than