Market Information Available to Teachers of Vocational Agriculture

(Continued from page 25)

bers of livestock and poultry, and so forth. Since it is so full of useful marketing information, it should be in all schools.

III. *The Agricultural Outlook* — Issued each March by the Bureau of Agricultural Economics. Gives the outlook of all phases of agriculture, and estimates the probable acreage for the coming season. While not strictly marketing information, it should be in the schools.

IV. *Crops and Markets* — Issued monthly by the United States Department of Agriculture. The price is 60 cents for one year. Secured by writing the Superintendent of Documents, Government Printing Office, Washington, D. C. Its informational matter is grouped as follows:

1. Cold storage holdings.
2. Cotton.
3. Crop and livestock reports.
4. Dairy and poultry products.
5. Feedstuffs.
6. Fruits and vegetables.
7. Grain and hay.
8. Livestock and livestock products.
9. Prices.
10. Recent agricultural publications.
11. Seeds.
12. Acreages and farm values.
13. A general outlook of agriculture.
14. Many other informational articles.

This publication should be in the schools.

V. *Monthly Crop Reports for the United States*—These reports begin with January, are issued by the Bureau of Markets of the U. S. D. A., and are free. A mimeographed report of about sixteen pages, and contains a wealth of material of value to the vocational teacher.

VI. *Weekly Market Review of Fruits and Vegetables* — This mimeographed page is issued by the Bureau of Agricultural Economics and can be had free by writing the Office of Publications, United States Department of Agriculture, Washington, D. C. Gives brief reports of crop conditions and prevailing prices, movements of fruit and vegetables, and holdings in storage. Of value to school located in the major fruit and vegetable growing sections.

VII. *The Daily Market Report of Butter, Cheese, Eggs, and Dressed Poultry* — This mimeographed report is issued daily by the Market News Service of the Bureau of Agricultural Economics at 615 Mariners and Merchants Building, Third and Chestnut Streets, Philadelphia, Pennsylvania, and can be had free upon request. It gives daily reports of market conditions for butter, cheese, eggs, and dressed poultry, with statistical reports for Philadelphia, New York, Boston, and Chicago, giving the receipts, cold storage movements, and the holdings at these points. This report is of value to vocational departments.

VIII. *The Daily Market Report of Livestock*—This mimeographed report is free and is issued by the Bureau of Agricultural Economics of the United States Department of Agriculture at Philadelphia and Pittsburgh. It can be secured by writing the Pennsylvania and United States Department of Agriculture Livestock Market News Service, 306 Livestock Exchange Building, Pittsburgh, Pennsylvania, for the Pittsburgh report. It is not of much value except to those schools located in strong livestock regions or in regions where many steers and lambs are fed.

IX. *The Weekly Milk and Cream Report* — This mimeographed sheet is issued by the Bureau of Agricultural Economics and is secured free by writing the Market News Service, 615 Mariners and Merchants Building, Philadelphia, Pennsylvania. It gives the reports of the receipts of milk and cream in the Boston, New York, and Philadelphia market and the prices paid. It will be of value in schools in market milk areas.

X. *The Weekly Review of Wool Statistics*—Issued by the Bureau of Agricultural Economics, it can be secured free by writing Market News Service, 723 Appraisers Stores, Boston, Massachusetts. It gives the reports of market conditions of the Boston, Philadelphia, and New York markets, as well as the foreign wool market conditions. Of use only in wool-growing sections.

XI. *The Monthly Review of the Wool Market*—This publication is similar to the preceding one in all but the time of issue, this one being monthly.—Pennsylvania Rural Life Letter.

Individual and Team Demonstration As a Method in Teaching

(Continued from page 25)

Enthusiasm and intensity of purpose serve to hold the interest of the audience.

The demonstration should be designed to meet the needs of the group served.

The demonstration should set a strong pattern for practice.

A demonstration is not a lecture on a problem or practice.

Long, involved, and highly technical demonstrations are not effective.

Avoid long and uninteresting descriptions or stories.

Demonstrations designed primarily to win are not effective. It is better to select a unit of some practical project carried out by the members and then develop a winning demonstration from actual practice.

Suggestions for Improving the Weekly "Project Round-up Period"

(Continued from page 27)

guide him in keeping and bringing his project records up to date.

4. More class time should be taken in the discussion and comparison of the project results and practices. When this is done the boys begin to see more use in keeping records. Too much insistence and practice in merely keeping records without making use of them in a class discussion and otherwise, soon makes the whole business dull and uninteresting.

[In other columns of the magazine, is an article by Professor Gibson on "A Summary of Inaccuracies and Suggestions in Keeping Hog Project Records," which should prove very suggestive to the teacher in locating difficulties and

New Jersey Public Speaking Contestant Talks to 2,500 Farmers

THE big annual get-together of New Jersey farmers is Field Day at the College of Agriculture. June 15, some 2,500 farmers and their families gathered at the college to learn what the college and experiment station are doing for the agriculture of the state. On the speaking program were the president of Rutgers University and the dean of the College of Agriculture, and also, to the credit of vocational agriculture, the state winner in the F. F. A. Public Speaking Contest. This young man talked of co-operative marketing for farmers, and many favorable comments of his talk were heard after the meeting.

Prizes for the first, second, and third places in the state contest were awarded by the university at this meeting.

The advantages of having an F. F. A. boy appear before such a state meeting of farmers are obvious. The farmers learn that vocational agriculture and the F. F. A. are training the boys for leadership, and incidentally, the winning speaker has additional practice and gains increased confidence in his ability to appear before an audience.

Neighbors Gather for Double Evening School

(Continued from page 28)

I did not use an outside teacher until the closing evening. I believe it is a mistake to give the men the idea that they are to be entertained and that they have no work to do. I believe in having each man work out his problems in black and white. This gives him more of a feeling of accomplishment than any other one single thing.

The graduation exercises were one of the high spots in the school. Each member that had attended at least two-thirds of the meetings received a diploma. We had an outside speaker and a program was given by the F. F. A. chapter. Twenty-six of the 36 members received diplomas.

Success of any evening school can be determined by the improved practices resulting from the instruction. As a result of the unit in swine production, the men chose to do the following in the way of project work:

Eleven were to seed alfalfa for hog pasture.

Twelve to seed field for hogging down.

Fourteen to use sanitary measures in hog production.

Six to give brood sows more exercise.

Twenty-two to feed a better ration including bonemeal, alfalfa, protein supplement.

Five to improve breeding of stock.

Two to grow rape for pasture.

One sweet clover pasture.

I have visited each member of the school this summer, and I find that they not only are doing their project work but in many cases several additional improved practices suggested at meetings. I also find that men on the extreme edges of the community are copying the methods used by their neighbors who attended evening school; and the results of the school have extended far

VOL. V SEPTEMBER, 1932 No. 3

Agricultural Education

Up to the present time rural humanism has been outgeneraled by the forces of rural finance, which keep promising that all the good things of life will come of their own accord to rural society, if only everybody will turn in and make agriculture a paying business. The hour is coming, however, when the humanizing forces inherent in agriculture and country life will break the leash and strike out to find the way to modernized living; for they are now pretty well aware that agriculture will never be prosperous enough out of its own coffers, however well filled they may be, to guide farm men, women, and children to goals of life which require ideals of living to comprehend.

—Charles Josiah Galpin, 1924.

"Our ideal will never be met within life unless we have first achieved it within ourselves."

—Maeterlinck.

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.

MANAGING EDITORS

Carsie Hammonds, Lexington, Kentucky.....Editor
Sherman Dickinson, Columbia, Missouri.....Associate Editor
F. E. Moore, Des Moines, Iowa.....Consulting Editor
W. F. Stewart, Columbus, Ohio.....Business Manager

SPECIAL EDITORS

A. M. Field, St. Paul, Minnesota.....Methods
A. P. Davidson, Manhattan, Kansas.....Book Reviews
A. K. Getman, Albany, New York.....Professional
Edm. G. Magill, Blacksburg, Virginia.....Research
C. R. Wiseman, Brookings, South Dakota.....Research
H. O. Sampson, New Brunswick, New Jersey.....Future Farmers of America
G. A. Schmidt, Fort Collins, Colorado.....Supervised Practice
Lester B. Pollum, Topeka, Kansas.....Farm Mechanics
Roy H. Thomas, Raleigh, North Carolina.....Part-time Schools
C. L. Davis, Austin, Texas.....Evening Schools

EDITING-MANAGING BOARD

F. E. Armstrong, Hawaii; J. D. Blackwell, Maryland; Paul Chapman, Georgia; Sherman Dickinson, Missouri; R. W. Gregory, Indiana; Carsie Hammonds, Kentucky; Ray Fife, Ohio; William Kerr, Idaho; C. H. Lane, Washington, D. C.; F. E. Moore, Iowa; L. M. Sasman, Wisconsin; W. F. Stewart, Ohio.

Subscription price, $1 per year, payable at the office of the Meredith Publishing Company, Des Moines, Iowa. Foreign subscriptions, $1.25. Subscriptions terminate January 1 or July 1. Single copies, 10 cents. Contributions should be sent to the Special Editors or to the Editor. No advertising is accepted.

Entered as second-class matter, under Act of Congress, March 3, 1879, at the post office, Des Moines, Iowa.

SKILLFUL TEACHING

IN SEPTEMBER classroom teaching begins. However important may be the other responsibilities of the teacher of vocational agriculture, his greatest responsibility is classroom teaching. The job of the teacher is to teach. There is always danger lest we lose sight of this fact.

There will be a greater number of skillful teachers and more skillful teaching when these are given more recognition by our profession. Teaching is at the heart and center of the teaching profession, yet it receives less recognition than almost any other phase of educational work. We praise the man or woman who does a good piece of research work. And that's all right. We give glory to the efficient school administrator. And that's all right. We may give credit to the teacher for a large evening school enrollment or a large income from farm practice or a winning judging team. But how often do we give recognition for good teaching? One sometimes hears a person say, somewhat boastfully, "I do not give any of my time now to teaching." As if to say, "Teaching is for people who do not know any better, but it takes brains to do what I am doing." The skillful teacher must come to receive the same recognition as an equally skillful school administrator or researcher. This recognition is given so seldom that it makes one's soul feel good to hear of a skillful teacher being recognized as such. A few weeks ago the writer heard a supervisor speak of so-and-so as being a wonderful teacher. Away down in my heart I cheered and said, "Hurrah for Mr. ———." Hurrah for the teaching profession when it recognizes its teachers as teachers.

There is no royal road to skillful teaching. Genuine skill in teaching, for most of us, comes thru continued study and persistent, painstaking practice, assuming some degree of initiative and resourcefulness to begin with. The person who lacks these qualities cannot become a skillful teacher.

The job of the teacher is to educate boys and men. If we teachers would devote more attention to the improvement of our classroom teaching, we might not need to worry so much about a number of other things.—C. H.

FAIR-WEATHER FRIENDS

VOCATIONAL agriculture has many true and loyal friends. This is a proven fact attested to by our recent experiences in connection with attempted congressional action.

The larger number of these friends belong to a group not primarily interested in vocational teaching as a means of business men, who felt that the vocational agriculture program was worth while and worth fighting for. Many teachers did yeoman service in notifying their constituents of the danger which threatened and suggesting methods of attack. I firmly believe that the friends here referred to are true friends and may be counted upon in all emergencies.

We have, however, been discovering within recent months that a certain group of men may be regarded as "fair-weather friends." Unfortunately these men are within our own group of teachers. They may be called the "in and outers" of vocational agriculture. Many of them are very good men in some respects, but practically all of them have one characteristic in common; that is, a lack of *true interest* in teaching vocational agriculture. In most cases they entered the field "because there was nothing else available" and left it just the minute the pastures looked greener some place else.

They left, but now that the other pastures have turned brown, they are flocking back in large numbers and assuring us that they "are sorry they left" and that their "real fundamental interest has always been in vocational agriculture." They go on to claim that "experience out in the world has broadened them and increased their value as teachers." I have little sympathy, professionally, with such men. They come back after having been out of touch with the vocational program, unfamiliar with improvements which have developed, and nine times out of ten with an unchanging fundamental attitude. They enter the competition for positions with men already employed and with new men; lowering the salary scale and causing a loss to those men who have remained on the job and discouragement to those who have conscientiously prepared for the teaching of vocational agriculture.

My whole feeling in this matter is that when a man leaves one profession for another, he clearly indicates a lack of interest and proper attitude, and should be definitely discouraged from re-entering the profession which he has left for "greener pastures."—S. D.

OUR FUTURE FARMERS FUNCTION

OVER our desk pass many F. F. A. publications. Most of these are mimeographed; some are printed and illustrated. All seem to show that the organization is functioning. We see numerous evidences of leadership among the boys. We find chapters with relief programs. We see many evidences of co-operation among the pupils. In nearly every publication is found mention of father and son, or parent and son, banquets. Public speaking contests are reported, and so we might go on at length.

How proud are those of us who attended that first organization at Kansas City a few years ago, to see how well our child has grown and developed.

It was a great work that was started and means much for the future of farming. Let the good work continue.—H. O. S.

INDEX TO AGRICULTURAL EDUCATION MAGAZINE AVAILABLE

An index of the magazine has been prepared to take care of all issues thru December, 1931. It should prove especially helpful to any readers who have files of the magazine which they use extensively. Subjects are listed under 16 common headings and are cross-indexed appropriately. Copies of the index may be secured from Dr. W. F. Stewart, The Ohio State University, Columbus, Ohio, at the cost of mimeographing and postage—20 cents per copy.

Professional

Small Foxes Spoil the Vines

R. M. STEWART, Cornell University

R. M. Stewart

VACATION is over. Once more a new regiment of young men has been added to the educational army of the Republic. I wonder how many companies will be operating in vocational agriculture. I might guess that we shall have several hundred new recruits for 1932–33, in spite of the depression and in spite of our disturbances at Washington.

As I look back upon my first position after taking my first degree, I recall one thing more than anything else. I wanted to *do* something. I had been struggling for six years to complete my secondary education and then the four-year college course. When I wasn't studying, I was working, it seemed, to keep myself in college. I wanted freedom to try my hand at a real job and the opportunity to earn some money. In those days we didn't get much money for our services. My first year's salary, after graduating, was less than $700 for the nine months. I have thought of that many times when the boys here have complained about two and a half times that salary. After all, I feel that to have the opportunity to try one's mettle in the performance of a constructive service is the greatest kind of opportunity, for the satisfactions of life come that way in reality.

While I was writing the foregoing, a Cornell student who will complete his work at the end of the summer session came in for help. He verified what I have said for he, too, longs now to *do* something. I could see clearly that the salary part of the consideration was only a means to the end. He desires that freedom that comes with relative independence. He wanted a job. He has spent four years in college under great handicaps, but he has the character that comes from a worthy struggle. Society needs such men as he, as never before, for he looks the whole world in the face, willing to accept the challenge of the day.

A Philosophy of Life

This message, if it has any point, is directed to these new companies of teachers (you) that the states have mustered to "carry on" the work of vocational agriculture. What resources have you to draw upon as you enter this new service? What is your philosophy of life? Do you think you can give a substantial interpretation of what vocational agriculture means? Do you see the school? It is important, of course, to grasp the significance of one's job. Don't forget that the significance of one's job has two aspects, yourself and the social group that you serve. The future of vocational agriculture lies largely, after all, in the hands of the teachers who are called to serve in its behalf. No vocation rises higher than the persons who work in it. You, as the vocational leaders for agriculture, must furnish the vision characteristic of leadership. You cannot do that without a philosophy; that is, you must know the meaning of vocational education in agriculture. It is a changing meaning too. Vocational agriculture is for a changing world.

Materials of Teaching

Then, you must know what to teach. I remember an occasion during my first year of teaching, when I was criticized by a townsman for not being present at a public meeting the night before. I replied that I couldn't attend because I had to prepare my lessons for the next day. He came back, quick as a flash, "I thought that you were a graduate of the University." Well, I was, but I found that real teaching was something else than pouring stored knowledge into empty vessels. *Teaching*, ah! there's the rub. Teaching has to be analyzed, contemplated, organized, and carried on in the light of group needs, not merely in terms of stored knowledge.

I recall that our state supervisor refused to approve a certain graduate of the College of Agriculture for a certain position. This young man protested to me in various kinds of language. He ended his tirade by saying, "I know that I can teach those boys something." In answering this particular statement, I said in my reply to his letter, "What someting?" There still may be some young teachers who think that graduation from college is enough. It is not, of course. With varying needs and objectives to meet from week to week and from year to year, with differing individuals, and a relative abundance of teaching materials, the teacher has perennially new responsibilities in determining new ends, in adjusting means to ends, and in seeking appropriate methods for solving the problem, using the resources at the particular time and place.

General Personal Qualities

In spite of the many opportunities provided in the college community for the cultivation of the finest personal qualities, some young men fail to be impressed by them. How the general personal qualities affect one's success is frequently ignored by the young teacher of agriculture. On account of the nature

Do not stop reading this article when you find that the message is directed to new teachers. Regardless of how long you have taught, you should be a new teacher this fall. Here is a message for you.—Editor.

considerable basis for such an idea, but he forgets that the virtue of work clothes, or any kind of clothes, rests in their appropriateness. Even dirty clothes fail to be appropriate in a dirty job after a certain degree of dirtiness is reached. I recall how one of our best men came to be rated very low by the board of education (in a country village, too) because he failed to distinguish appropriateness of dress for the barn and the classroom.

Dress is only one factor in these general personal qualities, but it is an important one, since the teacher of agriculture does have the responsibility of meeting different dress standards. Other qualities quite as important are those of physical vigor, voice and gestures, enthusiasm and inspiration, appreciation of the excellencies of life, progressiveness, co-operation with others, and so forth. It behooves young teachers to regard these qualities, therefore, as a part and parcel of the whole personality as well as the technical and professional qualities on account of which his degree was given. In my own experience I have had to rate a teacher lower in general teaching effect because of poor English, and failure to recognize excellencies of one kind or another. Let me put it this way. The teacher of agriculture, whose work as a teacher is belittled or unappreciated because of the teacher's neglect of those personal qualities that pass current as the mark of good breeding and culture, not only interferes with his own progress but helps to stigmatize agriculture in the school. Some teachers neglect appropriateness of dress because they are teachers of agriculture. They may not shave. They may say "have went" with ignorance or complacency or depend upon slang because they lack a better vocabulary. The reactions, from many principals over a number of years, lead me to think that such neglects are no small part of the failures of young teachers.

Did I hear you say that I was overemphasizing those qualities, that your success depends upon what you do in the agricultural work? Of course, such fine qualities will never meet the specific needs of a lesson in agriculture. It is interesting to note that there is a very close relationship between the general personal qualities that the teacher possesses and the proper standards of work within his special field. The teacher who

shop job (because it was for farming and not for cabinet-making) was using his special field to cultivate carelessness and inefficiency that are just as objectionable (and of the same character import) as to use poor English, dress inappropriately, or disregard the rights of others. We cannot be too careful in promoting high standards for the person in all respects, if we are expecting equal ratings with other teachers.

Plan to Grow

In conclusion, I wish to emphasize the importance of planning a program of growth. You may feel that I have tried to criticize. If so, it is intended to be constructive. One should be conscious of his faults. We all have them. One by one they can be eliminated by plan. We grow towards what we desire. If our voices are objectionable, let us do the best we can to modify them. If we lack self-control, that too can be handled by a plan. If we lack poise, let us get it. If we cannot meet people comfortably, let us meet them, especially those with whom we have connections in the school and community. If we "don't know beans," let us study beans. Whatever is a weakness of general or professional qualities, let us attack that with a plan. This makes for balance, and balance comes thru growth. The young teacher must grow. May you grow happily and effectively. Teaching, itself, is an art. Don't expect to reach everything the first year. A planned life of teaching gives promise of a rich reward—the opportunity to carry on a distinctive community service.

News

C. L. ANGERER, Assistant State Supervisor for Missouri, spoke before the Iowa Vocational Agriculture Conference in June on "Supervised Practice." He has been at Ithaca this summer taking work toward his doctorate.

R. W. "Dick" Gregory of Indiana has been in Ithaca for the six weeks' summer session working toward his doctor's degree.

Leroy Clements, State Supervisor of Nebraska, taught at Fort Collins, Colorado, in their short summer session, doing some graduate work and assisting in a course having to do with Future Farmer activities.

Dr. Sherman Dickinson attended the Nebraska Vocational Agriculture Conference at Lincoln in June, making two speeches: one on the "Future of Agricultural Education" and the other on "Supervised Practice." He also attended the Indiana State Conference held at Lafayette in June and spoke twice on the supervised practice theme. Earlier in the spring he appeared on the program of the Agricultural Education Section of the Kentucky Educational Association in Louisville.

This is the third summer for Dr. A. M. Field to teach at Cornell University where he received his doctor's degree a few years ago. There his teaching has been in the Graduate School of Education organized a year or so ago. The editor presumes that Dr. Field will assume responsibility for the Department of Agricultural Education at the University of Minnesota as Dr. Storm retired from

"The Teacher of Agriculture Has Some Job"

(A detailed report of a day's activities of a teacher of vocational agriculture—July 13, 1932)

8:00—Read mail and filed several letters. Made notes for replies.

8:15—Checked and corrected two drawings and bill of materials for the new West Virginia vocational agriculture bulletin and chart cabinet, and mailed to Charleston. Discussed plan for trip to Morgantown with Calc while checking the plan.

8:40—Planned the morning's activities for Mr. Price, a student in agricultural education.

8:55—Helped Pete Palumbo begin on henhouse. Gave a demonstration on cutting and nailing insulation and made plan for finishing the structure.

9:50—Left for Morgantown with Calc and Palumbo. Made plans enroute for selling broilers and filing data on markets secured. Helped sell broilers at three markets. Helped Pete buy Sisalkraft and secure Chlorena for Harry Born's poults. Calc secured wire for range for pullets. Secured two 50-gallon drums for shop and F. F. A. enterprise. Secured cartons for marketing broilers.

12:30—Returned wire to Calc's place.

12:45—Lunch. Called Miss McMillen on phone relative to diseased poults.

1:10—Conference with Mr. Price on morning's work and made plans for the afternoon.

1:30—Visited Luther Brown to arrange for work on F. F. A. potato enterprise.

1:50—Helped Cale, Stone, and Brown begin cultivating potatoes. Adjusted cultivator, plowed one round, and hoed one row to show method of removing weeds. Examined entire field for evidence of disease, and the condition of tuber unit seed plots in the field. Conference with Mr. Wolfe and pointed out the difference of the common and superior seed, and difference in injury of flee beetles on the various varieties. Made plan to use more spray solution at next spray. Discussed the whole project with Mr. Price and pointed out some of its merits and demerits as a teaching device. Made picture of boys at work.

4:00—Visited Rosamond Kum and helped with chick, hen, and potato enterprises. Made plans on the whole program of work. Planned to complete records and annual report of the F. F. A. Chapter. Discussed the work with Mr. and Mrs. Kum.

6:10—Made plan with Davis Welton on spraying potatoes and cultivating corn. Planned for visit later in the week to study entire program.

7:30—Dinner—Read evening paper and mail.

8:10—Mowed around shrubbery at vocational agriculture building.

8:30—Gave Mr. Kelly plan for side dressing corn with nitrogen.

8:50—Conference with Mr. McMillen on cultivating potatoes.

9:10—Conference with Patsy Cipolloni on dressing and marketing broilers for the next day. Posted Patsy's account with F. F. A. up to date, and he paid $13 on same. Totaled outstanding bills of F. F. A. and made up payments for

9:30—Made trip to F. F. A. enterprise with Patsy to return cultivator and hoes.

10:10—Made postmortem and microscopic examination of a diseased chick from Kum's flock.

10:25—Conference with Miss Sell on plans for the vocational program at the State Educational Meeting at Huntington next fall.

10:45—Checked over Cale's records and plans in enterprise book.

10:55—Wrote two business letters.

11:05—Worked on new four-year course of study.

11:30—Made plan for next day's work.

11:35—Checked oil in truck and milage for the day. (53 miles.)

11:45—Retired.

—*The Vo Ag Pilot, West Virginia.*

Acute or Chronic Catastrophe

"Civilization is a race between education and catastrophe!" says H. G. Wells.

If catastrophes halt the progress of education, civilization will be retarded. Catastrophes may be either acute or chronic in nature. The depression and reduced revenue for schools may be considered an acute catastrophe. This could not have been avoided by persons engaged in educational work. However, many of the chronic catastrophes which are likely to follow can be prevented if intelligent precautions are taken.

Teachers' salaries had to be reduced. A reduced income forces one to curtail certain activities which can be carried on by the expenditure of his earnings. It takes money for a teacher of agriculture to supervise farm practice, train judging teams, recruit prospective pupils, and to carry on the other activities necessary to a successful program of vocational agriculture. You may say that you will have to curtail your program, that you cannot afford to do as much as you have been doing. Curtailing one's program is the beginning of chronic catastrophes. When you begin to curtail your program, the boys in your classes will begin to lose interest and drop out of school, and parents and patrons will begin to lose faith in you and your job. You cannot afford to let up. In this period of readjustment your services as vocational teacher are needed as never before. Now, if ever, you need to put your whole heart into your job. Society will eventually pay in honor or money or both for worthwhile service.

Vocational education has recently met and safely passed a series of crises. Its progress and achievement will be carefully watched during the next few years. You cannot cut out and slow down if you expect to win. Wherein do you need to broaden your scope?

It may be you have met with adversity's blast
And have been bowed to earth with its fury;
That the year that has recently passed
Was as hard as a prejudiced jury.

You can't quit and give up the guns,
You must look to the future with hope.
Instead of curtailing the things to be done,
Reverse your procedure and broaden

Supervised Practice

Supervised Practice in Farming

L. M. SASMAN, State Supervisor Vocational Agriculture, Wisconsin

L. M. Sasman

THE Smith-Hughes law requires that students enrolled in vocational agriculture carry on directed or supervised practice in agriculture for at least six months a year. For the great majority of students enrolled, this requirement has been met by individual projects. In most cases, minor attention is given to actual practice in farming on the part of the students.

Vocational agriculture in the high schools is really composed of two parts: vocational guidance and vocational training.

Many farm boys when they go to high school do so with the thought of getting away from the farm. They have lived in such close contact with farming that its difficulties and disadvantages have been impressed upon them, while some distant occupation of which they know nothing seems to offer wonderful opportunities. (At least that has been the condition for the past decade. It may not be so much so for a while.) These boys or many of them enroll in vocational agriculture because they know the teacher, and the subject is one with which they are familiar. They think they may possibly go on to college and become agriculture teachers or county agents, but they do not intend, when they enter high school, that they will ever be farmers. The principal job of the agriculture teacher, so far as those boys are concerned, is to show them the opportunities in farming, and, insofar as possible, also show the opportunities in other lines of work in which they are interested.

Another group of farm boys come to high school and enroll in agriculture with the intention of getting as much training as possible for farming. In the first year or two of high school this group is not usually as large as the other two, but it grows somewhat in size due to the fact that by the time the boys are juniors and seniors they see greater opportunities in farming and less opportunity in other occupations. Of course, in the meantime a goodly number of the farm boys who entered high school have dropped out and are actually on the farms whether they wanted to be or not.

The individual project is largely a guidance feature. A boy is encouraged to own calves, pigs, a flock of chickens, or some corn because such ownership stimulates within him his love for the farm and tends to direct him toward farming. The project may and often does grow in size

head of livestock, a flock of poultry, or several acres of crops. We point with pride to those instances but they are in the minority. In a great many cases the boy carries different projects every year with very little continuity of work or training. But even if he does develop a continuation project of considerable scope, he may still fail to receive very much actual supervised practice in farming.

During the past few years, increased attention has been given to other supervised practice to supplement the individual projects. The boys keep herd records, test seed corn, inoculate legumes, apply fertilizer, or introduce some other form of improved practice on the farm. These practices grow out of the classroom instruction, and in many cases do give some very good practice in operative and managerial jobs with which the trained farmer should be acquainted.

Practice in Farming

But of what should supervised practice in farming consist? If we really are going to give vocational courses in agriculture with practice in farming, it would seem that we should know what abilities a boy has and needs to have to succeed in farming. When a boy enrolls in an agriculture department, or before he enrolls, if possible, the instructor should determine by a conference with the boy and his parents what the boy now knows about farming and what he should know when he is ready to farm and what abilities he has and needs to have. Then a program of study and practice should be developed which will give the boy the necessary knowledge and skill. Supervised practice should include practice in all of the jobs which good farming requires. Much of that practice will be under the direction of the parents, who are better able to supervise it than the teacher, but the teacher's responsibility is to see that the boy has the opportunity for the practice. In addition to practice in operative jobs, the boy must have practice in the management of enterprises. Our best projects in Wisconsin have been our poultry projects and in some cases swine projects, because the boy had the management of a large part of the enterprise. But such practice must not be limited to one enterprise if we are really going to give supervised practice in farming. Of course, it is not possible in many cases for a farmer to turn over the management of his dairy herd to his son in high school, but it is possible for him to turn over the management of part of the herd or co-operate with the boy in the management of the herd so that the boy acquires the necessary managerial ability.

Suppose we were to agree that if we

culture, we should develop a supervised practice program that gives each boy such practice as will train him effectively for farming by the time he has completed his training program.

The first step in such a practice program is a determination of what abilities a farmer needs to have in order to be successful. A partial list of such abilities in animal husbandry has been worked out by certain agriculture teachers in Wisconsin at local conferences they have held this spring. This is one example of work that is being done to decide what a farmer should be able to do and consequently what practice a farm boy should have during his training program. It is apparent that this list of jobs would vary in different sections of the state, altho when it comes to an analysis of any one enterprise such as dairying, for example, the list would be very much the same no matter for what section of the state it was prepared or even if it were prepared for some other state.

After we have studied the situation so that we know what abilities a successful farmer needs to have, our next job is to find out which of these abilities a boy has acquired before he enrolls in our agriculture department. We can get this information by observation and by conferences with the boy and his parents. Thru such conferences we should be able to set up a long-time program of practice so that a freshman boy will get practice in operative and managerial jobs that he can carry on and the program will develop as the ability of the boy develops. Of course, in this program as in any program of supervised practice in farming, success depends upon the ability of the teacher to get the co-operation of the parents. It is safe to say that in most farming skills the father of the boy has more ability than the teacher. He is not, however, in most cases as good a teacher. It is the job of the agriculture teacher to see that the boy has the opportunity to acquire the skills that the parent has and to develop some abilities that the parent has not acquired. I believe that such a program of supervised practice in farming will receive stronger support from the majority of farmers than will the program of individual projects. I am not advocating that individual projects be abandoned, but I believe that they usually involve guidance more than vocational training, and that for the purposes of vocational training they are not as important as is a long-time program definitely set up to give the boy training in farming abilities.

Financial Records

In case a program of this kind is set up what place would financial records take? Project records have been the nightmare of vocational agriculture. Boys have

raising pigs, calves, and hens. Many times, probably the majority of times, the project crop or stock is raised in such a manner that the cost of production, while significant for that particular purpose, has little relationship to the normal costs of production. On the other hand, the farmer's lack of knowledge of production costs is one of the great stumbling blocks in the way of securing fair play for farming. (Altho his lack of knowledge in this respect is not greater, probably, than that lack of knowledge of the average business man of the condition of his business.) The future farmer of America needs training in the keeping of farm accounts. The best way to have him secure that training is to have him keep accounts of the enterprises in which he is engaged. Those accounts should cover the whole enterprise so that they would have real significance to the boy and his parents. The boy should be further encouraged to keep complete accounts of the whole farming business. Many teachers have been working toward that end for several years with varying degrees of success. At least one of our Wisconsin men has been working for the past two years on a farm record book which he has used on his own farm and believes is adapted for wide use on Wisconsin farms. Of course, our purpose should be to use a record book which will give an accurate and complete account of the farm business and still be simple enough for use by high school boys. Of course, records of individual projects in crops and livestock will continue to be kept for various reasons. In the great majority of cases they have very little real significance. I would except, however, records of complete poultry flocks and of litters of hogs and other complete enterprise records which have been really valuable in many cases.

Earning Power to Follow Practice

We should, then, adopt the general policy of developing supervised practice in farming of such a nature as to give farm boys practice in all of the operative and managerial skills involved in the type of farming in which they are likely to engage. We should place emphasis upon learning thru practice, with increased earning power to follow, rather than necessarily to accompany the practice. We should keep accurate records of what abilities we develop and what improved practices result. We should continue to develop individual projects for the purpose of guidance thru the inspiration which a boy gets from owning and caring for something of his own. There is little value to the records of profit from such projects. We should emphasize records of enterprise or of the farming business so that a boy would get a complete picture of the problems involved in the whole business of farming.

Now I would not have you think that this idea is original with me, or that Wisconsin is about to adopt a policy radically different from that of other states. Minnesota for four or five years at least has placed minor emphasis upon the individual project owned by the boy, and major emphasis upon the ability of the boy to do the things which a farmer needs to do. Indiana for the past two or three years, especially, has been trying to develop a program which would give real practice in farming. Last fall they at which they "analyzed the business of a given farm and assisted the boy (who in each case was a freshman), his father, and the teacher in building for the boy a supervised farm practice program which would give the boy actual practical experience in operating and managing the farm in co-operation with his father, as a profitable business." Their system indicates the trend that is common in many states. New York state has printed a bulletin, "The Outline of Content for Vocational Agriculture," which emphasizes the responsibility of local teachers to meet the training requirement of specific types of farming. The tendency thruout the nation, I believe, is to set up a program which will actually give vocational training. I believe the general opinion of state supervisors and agriculture teachers is that our supervised practice program in the past has been meeting a set requirement of a law rather than accomplishing a definite purpose in training. If we are going to actually train farm boys for farming, our program of supervised practice must be definitely set up to include training in the abilities a successful farmer needs to have.

Project Tour for Prospective Freshmen

MANY instructors are not devoting enough time and interest during the summer in "lining up" freshmen agriculture students for the coming year's classes. Why not have an incoming freshman project tour this summer and have these boys visit and study some of the best projects of your students? This would be an excellent method of introducing the project idea to the freshman. As you all know, one of the best methods of teaching is by having the boy see how it is done, rather than tell it to him.

Several results could be accomplished by a tour of this kind: (1) The instructor could become personally acquainted with each boy and learn of his agricultural interests and possibilities for a project; (2) the boy would learn, by observing other projects, some of the qualifications for a good project; (3) it would get the student in the proper frame of mind where he would become interested in the project idea; (4) the boy would become interested in studying the selection of his own project. It is far better for a boy to voluntarily make his own selection, than for someone to do it for him; (5) it would reduce the number of visits of the instructor to the boy's farm; (6) the instructor could have many boys lined up in project work before school starts.

A month before the tour, the instructor could visit many of these freshmen at their homes, get acquainted, briefly explain the agriculture work, and tell them about the proposed tour. Two weeks before the project tour an article could appear in the local paper, and, a few days before the tour, postcards with some attractive cartoon explaining the tour could be sent to each rural freshman. The address of eighth grade graduates can be obtained from the county school superintendent. Two or three of your best F. F. A. members could go along on the tour to help ... dents. The boys' parents should be encouraged to go along on the tour. The prime object of this tour is to show and explain farm project work to the beginning freshmen and their parents. This tour should be scheduled at a season of the year when the work is not too rushing on the farm. On account of less work for the younger farm boys, it should be less difficult to get a group of eighth grade students on a trip of this kind.

A project study sheet should be formulated by the instructor in order that the boy can study the fundamental principles of farm project work and not merely look at boys' projects which might be of little value to the freshman. It would be far better to visit four projects with a careful study of each one, rather than visit a dozen projects and only glance at them.

PROJECT STUDY SHEET

	Excellent	Good	Fair	Poor
1. Is the project of sufficient size according to year the boy has been in high school?				
2. Is it a good project for the boy's farm?				
3. Do you think the boy likes his project work?				
4. Does the boy manage his project?				
5. Has the boy made use of his agricultural instruction in high school?				
6. Is the project record book neat?				

—*The Vocational Oregonian*, June, 1932.

A Finance Plan for Projects

HUDSON WREN has recently worked out a plan for financing boys' projects. The plan is similar to that used last year by the federal government in financing the farmers' feed, fertilizer, and seed loans. Most of our teachers are familiar with the federal plan and may desire to use it some this year. The details of the plan are:

Let each boy prepare for himself, under the guidance of his parents and the teacher of vocational agriculture, a personal budget of expenses for one year. The folder prepared by K. L. Holloway, University of Arkansas, is suggested as an aid in preparing this budget. Then figure the scope of the supervised practice necessary to provide sufficient income to meet this expenditure.

Then let each pupil make a complete plan for carrying out this supervised practice program. The approval of the parents and the teacher of vocational agriculture should be secured by the boy.

Application should then be made to the local bank, submitting the budget and the approved plan to the bank with the application blank. (A form is used.)

Make a personal note on a form supplied by the bank. Such note to take effect when the loan is granted.

Then make out a crop and chattel mortgage in duplicate, one form to be filed on the county records and the other to be kept by the bank making the loan.

Keeping a Progressive Record of Projects on the Enterprise Basis

G. A. SCHMIDT, Colorado Agricultural College

G. A. Schmidt

SOME TIME ago H. E. Lattig, Professor of Agricultural Education at the University of Idaho, suggested a method of keeping a progressive record of projects, on the enterprise basis, for teaching purposes. This suggestion has been developed and has been put to very practical use by many teachers. It has proven to be of considerable value in keeping up interest in project work during the school year.

As indicated by the suggestive forms accompanying this discussion, all project workers having similar projects, as for instance those who have a winter egg-laying project, record the data called for on the record forms. In case of winter egg production, the average monthly production of the birds which each boy obtained will undoubtedly vary. The fact that this production does vary leads to a good problem. "Just why do the results vary?" If the record form is properly made out, and if it takes into consideration all of the important factors of production, it should be possible to discover the results for the variation in production from the data assembled by the different boys on the record form for this enterprise.

Then too, it is very good teaching if at the appropriate times the class visits the boys who have poultry projects, makes first-hand observation of the management given to the flocks, and sees conditions as they actually exist. What has been said of poultry projects in this connection applies equally well to any other enterprise in which several boys in a class have a project.

In case of crop projects, a difference in stand or in condition of the crop is about all that could be noticed or observed during the growing period of the crop, but in projects of this kind the final average yield per acre, which undoubtedly will vary, offers a good opportunity for effective project analysis at the completion of the projects.

The forms suggested in this article are only illustrative of the type of forms that might be kept for this kind of work. Undoubtedly each teacher has his own ideas as to what factors to insert on such forms and what data should be collected at the beginning of the projects and during the progress of the projects.

It has been found very practical to keep these progressive records on cardboards measuring about two and one-half feet long and a foot or more wide. Large sheets of wrapping paper serve equally as well.

A Finance Plan for Projects

(Continued from page 38)

Then draw up parent or guardian's agreement certifying that the parent will not enforce his property right on crop or livestock. (A form is used.)

It will be noted that the loan is to be made in installments and additional installments require the approval of the teacher. This will, it is believed, give added incentive for teachers of vocational agriculture to more closely supervise their practice programs.

Some of the advantages of this plan are:

1. Acquaints the boy with his local banker.
2. Gives the boy an added incentive for accurately "estimating of costs" of the various enterprises relative to his home farm.
3. Gives practical experience in making personal and crop budgets.
4. Motivates the making of a plan for supervised practice work.
5. Gives opportunity to put into practice improved methods of farming, while guidance from the teacher is available.
6. Gives practical experience in executing legal documents.
7. Gives teachers an incentive to promote and encourage supervised practice work.
8. Gives practical experience in handling money.
9. Lightens the financial burden of parents who are trying to keep their children in school and still make ends meet.—Arkansas Vocational Visitor.

KEEPING A PROGRESSIVE RECORD OF PROJECTS ON THE ENTERPRISE BASIS

WINTER EGG PRODUCTION

Project Worker	Number of Laying Hens	Age of Birds	Breed	Breeding	Ration	Pasture	Housing	Average Production Per Bird			
								Sept.	Oct.	Nov.	Etc.

RAISING AND FATTENING HOGS

Names of Boys	Number of Growing Animals	Average Age	Breed	Breeding	Ration	Pasture	Average Daily Gain and Average Cost Per Pound Per Month					
							Sept.		Oct.		Nov.	Etc.
							pounds gain	cost per pound	pounds gain	cost per pound		

POTATO PRODUCTION

Names of Boys	Acreage	Previous Crops	Seed Treatment	Fertilization	Date of Planting	Spraying	Stand	Number of Cultivations	Average Yield Per Acre

A General Basic Outline for Developing a Home Project

L. R. DAVIES
State Supervisor Agricultural Education,
Fort Collins, Colorado

SUGGESTIONS as to what may be anticipated as problems and their use in home project work are given below. In classwork, sections I–VI should be considered first; VII and VIII should be developed individually as the need arises in the pupils' supervised practice program.

I. *Co-operation of the Parents.*
 1. What is the advice of your parents as to a project training program?
 2. Correlations.
  a. To home crops and livestock.
  b. To the boy's ability—physical and financial.
  c. To the size of the home farm.
 3. Financial needs of the project.
  a. What backing will the parents give?
  b. What is your financial resources —money, investments?
  c. Will it be necessary to borrow money?
 4. What available land and livestock may you obtain?
  a. Is the land irrigable? Drained?
  b. Are the animals purebred?
 5. Have you permission to use your own initiative?

II. *Possibilities of making money on selected project.*
 1. Estimate the cost items of your project, and total.
 2. Estimate the total income.
 3. Using 1 and 2, estimate profit or loss.
 4. Make your decisions as to any changes necessary for profit.

III. *Training Values.*
 1. Will the project profit help you get started in farming?
 2. Will the project provide training experience for successful farming?

The following problems should be developed by the students rather than the teacher. Teachers should not think for the pupils.

IV. *Choosing a Breed or Crop Variety.*
 1. What are the local conditions?
  a. Feeding, market, demand, soil, weather, moisture, and harvest.
 2. What breeds or varieties are available?
 3. What is your personal preference?
 4. Select breed or variety to meet these conditions.

V. *Selecting a Type.*
 1. Study type in judging work.
 2. What are the market demands?
 3. What types are being selected by the foremost producers?

VI. *Availability of Equipment.*
 1. List all necessary equipment for stock or crop production.
 2. List all available equipment for stock or crop production.
 3. Where may you obtain equipment which you need to get?

VII. *Feeding and Cultural Methods.*
Animal Husbandry.
 1. What rations must be fed at different ages.
 2. Make a list of the feeds that may be used.
 3. What feeds do you have that you may use and not buy?
 4. When market the product, see VIII.

Agronomy.
 1. What is the soil analysis as to phosphates, nitrate nitrogen, organic matter, lime, total alkali and P. H. values.
 2. What fertilizer will be needed?
 3. When will you plow?
  a. How deep will you plow?
  b. What kind of a plow will you use?
 4. Seeding and planting the crop.
  a. What do the leading farmers use, and where do they get it?
  b. When do the local farmers plant and what are the results?
 5. When will cultivation and irrigation be necessary?
 6. When market the product? See VIII.

VIII. *Marketing.*
 1. Time to harvest.
  a. Study market conditions.
  b. Study crop conditions.
  c. What will the labor conditions be?
 2. Where shall products be marketed?
  a. How do the successful farmers market their product?
  b. When do the successful farmers market their product?
  c. What are the prevailing market prices?

My Plans for Becoming a Farmer

JOHN GARDNER, Woodruff, Arizona

MY FIRST inclination of choosing a vocation came before I entered high school. I liked to work with animals and the soil. This has grown into a strong desire while taking agriculture.

In order to be a successful farmer I have set up a definite goal to work towards. By 1936 I expect to have 8 profitable cows, 4 good heifers, some calves, and 2 good brood sows farrowing two litters a year. I hope to be farming 20 acres of good land. I will try to own part, or all, of the land. I expect to follow a rotation system. I plan to have 8 acres of corn, 12 acres of alfalfa, and 4 acres of small grain. After this year I expect to grow 1 acre of suitable cash crop each year. If I am able to reach this goal, I will be making a good living and will be able to improve and enlarge my farm business yearly.

I am thoroly aware that I will not have enough money to buy a business like this; nor will one be presented to me when 1936 arrives. The only way to get it is by work and slowly building up year by year.

In order to be systematic in this I have carefully planned my steps. For example, in dairying, to reach my 1936 goal I have set this plan to be followed:

In 1931—1 bred heifer.

In 1932—1 cow, 1 heifer, 2 heifer calves.

In 1933—2 cows, 2 heifers, 2 heifer calves.

For 1934—3 cows, 2 heifers, 3 heifer calves.

For 1935—5 cows, 3 heifers, 4 heifer calves.

For 1936—8 cows, 4 heifers, 6 heifer calves.

In all of the other enterprises I have a plan laid out to grow along with dairying. In some enterprises I am planning to grow faster than natural increase would allow. To do this I will have to

George Washington Planned Projects

A. L. DACY,
Essex County, Massachusetts

THE following quotation is from a letter which Washington addressed to his manager, James Anderson, dated December 10, 1799. It accompanied some thirty manuscript pages of detailed directions for planting every field on his four farms. Knowing as we do of his success as a practical farmer it is heartening to note the emphasis he placed upon careful planning and estimating.

This quotation, from the Science News Letter of February, 1932, accompanied a five-year rotation plan:

"A system closely pursued (altho it may not in all its parts be the best that could be devised) is attended with innumerable advantages. The conductor of the business, in this case, can never be in any dilemma in his proceedings. The overseers, and even the Negroes, know what is to be done, and what they are capable of doing, in ordinary seasons. In short, everything would move like clockwork. The force to be employed may be in due proportion to the work which is to be performed, and *a reasonable and tolerably accurate estimate* may be made of the produce. But when no plan is fixed, when directions flow from day to day, the business becomes a mere chaos, frequently shifting, and sometimes at a stand, for want of directions what to do, or the manner of doing it. These occasion a waste of time, which is of more importance than is generally imagined.

"Nothing can so effectively obviate the evil, as an established, and regular course of proceeding; made known to all who are actors in it, that all may thereby be enabled to play their parts to advantage.

"This would give ease to the principal conductor of the business, it would be more satisfactory to the persons who immediately overlook it, and would be less harassing to those who labor, as well as more beneficial to those who employ them." — Massachusetts Staff Letter, April, 1932.

Stimulating Interest in Projects

A. A. CLAYPOOL,
Instructor in Vocational Agriculture,
Newman, Illinois

THE project should be one of the most interesting features of the agriculture work. This, however, is not always the case. We have tried to stimulate interest here by individual instruction on the project, helping finance the project, and furnishing a home fair where the project can be exhibited. On Monday, each boy is expected to give a report on an article pertaining to his project. This keeps the boy interested and gives him experience in expressing himself on his feet. Several of our boys could not finance their own projects so the board of education started a project fund of $100, loaned to deserving boys at 5 percent interest. In the fall the department sponsors a community fair where each boy is allowed to exhibit his project. With the combination of these three features we have so stimulated the boys' interest in their projects that

Methods

Teaching Livestock Judging in High School

P. B. KIRK,
Vocational Agriculture Instructor,
Laramie High School

INSTRUCTION in judging livestock should have a more prominent place in high schools. If the livestock industry is to grow as it should, the off-grade and scrub animals found on the average farm must be replaced by a more efficient type. Such a program is entirely educational. To improve livestock successfully, either by gradual selection or by outright purchases, one must have the ability to recognize the desired qualities in the animals. This ability can be attained only thru study of livestock judging.

The trial and error method was not used in breeding up the type of livestock found at the stock shows today but, rather, a systematic method of eliminating the undesirable and developing the type of animal which can put on the most economical gains in the least time and bring the highest returns on the investment.

There are certain qualifications which a student must possess before he can become an expert judge of livestock. Probably most important of these is interest. The instructor can arouse the interest of the student by showing him why livestock judging will be a benefit to him and by pointing out instances where stockmen have made good or where they failed due to lack of knowledge of judging. He must make the course interesting by seeing the best stock possible and taking worthwhile trips which do not develop into a drudge because the students are compelled to judge continually during the course of all the trips. Each trip must be carefully planned. Competitive judging with nearby teams stimulates interest.

The student must have a clear conception of an ideal animal. In judging a class of dairy cattle, for example, it is essential to have the knowledge of type well established. Such knowledge can be acquired only thru study, observation, practice, and systematic judging exercises. After seeing champion stock several times, the student should immediately recognize slight deviations from the ideal. When this ability has been acquired, he is well on the path to being a good stock judge.

In the field of judging, rapid and accurate observation is of utmost importance. Unless the student can see the animal as it really is, the basis for a correct decision is wanting. In going over an individual or class of animals, a definite system should be followed. The student should strive always to make his observations complete as well as accurate. He should seek to develop the quality of dispatch in making his observations which requires much practice and study. In scoring an animal the student must use his judgment in deter-

point is of sufficient importance to warrant a perfect score. He must exercise his judgment often in placing a ring of animals, in deciding upon the relative merits of the individuals, and the final rating made.

Other factors to be considered are honesty and independence of decision. The student should not try to influence the judge by giving a set of false reasons. It is impossible for one who is dilatory and careless in his habits of observation, or who allows himself to see an animal or class of animals thru another's eyes, ever to develop into a competent judge. His rating must be based on his own judgment. In judging a class, he must have confidence in himself. The instructor can do much toward developing such an attitude in the student.

Last but not least in importance is the ability of the student to tell the judge what he has seen with the eye and felt with the hand; in other words, giving reasons. He must be accurate in his reasons and use judging terms whenever possible. Slang words or phrases, such as "fish-backed" hogs or "slap-sided" dairy cattle, are often used in livestock judging, and mean a lot to a judge hearing reasons. In giving reasons a student must know how to speak smoothly and accurately. He should be forceful and make every word count, look the judge in the eye, stand erect, and above all, be obedient at all times. Unless the student has confidence in himself, he will fail to reach the heights he has set out to attain.

Oftentimes, the livestock judge is asked to place the show stock at a contest. If, after placing a ring of animals, for example, he arranges the individuals as they were placed, explains upon what basis the class was judged and describes the ideal or what is wanted in that class, the educational value of the show is greatly enhanced.

Choosing Problems

I wonder how many of us, when we select a problem for class study, consider the availability of definitely established principles or standards for its solution. It is easy to find challenging problems; it is not easy to discover problems which may be profitably worked upon with the outcome the acquisition by the pupil of a new power over a situation he formerly could not master. Too often, I believe, we choose problems which are insoluble by anybody; experiences with these problems have the effect on the high school boy of leading him into a dark cellar and blowing out the light. Again, we too often settle problems, which really cannot be settled at all, on the basis of the naive guesses of the boys or hearsay evidence; the effect of such experiences can only be the reduction of the capacity of the mind for sound, straight thinking, the negation and counterbalancing of all of the truly educational experiences the

What Does the Boy Hear?

ONE of the troubles with certain methods of teaching lies in the fact that the intended information never gets clear thru to the boy's mind. This is often due to some fault in the boy's sensory mechanism, or it may be merely due to carelessness on the part of the teacher. In either case we ought to try to reduce the number of cases where such a result occurs. The following recently came to our attention.

In a test covering a large number of items in a poultry course, the question was asked, "How shall we discover which eggs should be taken from the incubator?" On his paper one boy stated, "You should 'cancel' the eggs." It seems evident that this subject had been discussed in the class but that the words probably have not been put on the board and very likely no laboratory practice has been used to demonstrate the method of candling eggs. Possibly the modern boy has no reason to understand the significance of "candle."

The important fact is that this demonstrated to a teacher that new terms ought to be put on the blackboard and that the teacher himself should be very careful in his enunciation of all words, particularly new terms. It seems quite probable that the candle was not a part of what we used to call the "apperceptive basis" of the boy's understanding the new experience. If the teacher had started with a practicum in candling eggs, it is very doubtful whether the boy could have missed the term. One also wonders what the word "cancel" meant to him in this connection, possibly to "eliminate" or to "cull," but very likely it meant nothing. We should be very careful about boys acquiring a lingo which means nothing.

Too much of our teaching is a loose discussion, assuming that every boy secures all the values which are thrown into the hopper in the course of this process. While we favor a discussion to introduce a problem, and another brief discussion to clinch the matter, at the end of the study, the main learning process is not sufficiently insured by mere discussion. It certainly is not insured by mere reading since some boys have a defect in that field as badly as this boy did in hearing. In 99 cases out of 100 we advise starting with a doing process, broadening the boy's activity to include everything we hope he will learn in connection with this operation.

We have often suggested that our boys do not spell as well as they should. Probably we are careless in helping them to an exact vocabulary. Insisting upon the correct pronunciation will help some. Putting the words very plainly on the blackboard at the time when the new word is introduced helps to link the pronunciation and the appearance of the word with the doing process, and these combined associations are likely to make the boy more sure of each of the points involved.—Massachusetts Staff

Evening Schools

Follow-up Work in Agricultural Evening Classes

C. H. VAN VLACK, Instructor in Vocational Agriculture, Audubon, Iowa

C. H. Van Vlack

IF WE are to have worthwhile results from evening classes in agriculture, and are to approach at all the limit of possibilities in adult vocational training, we should plan well and execute a thorogoing follow-up program.

Supervised practice, correlated with the classroom instruction, is the really big part of the adult vocational program. The great objective in such a program is to get the farmer to do that which is an improvement over what he formerly did. Professor G. A. Schmidt says, "to leave out or to ignore the directed or supervised practice work in evening classes takes the heart and soul, the vital core, out of any vocational training; moreover, when this practice is lacking the work is not vocational."

Farmers quite often readily agree that a certain practice is better than the old. Yet when it comes time to adopt the practice, or make the change, they are confronted with such difficulties as lack of skill, or they are in doubt as to how to go about the new job or the old job in a new way. Just here is where the teacher can do his greatest and most effective service in carrying to completion those changed practices which he helped the farmer to see, understand, and agree upon in the conference group meetings.

We might well say that one of the ways to secure good follow-up work is to visit the farmer on the job. This part of the program need not be delayed until the end of the regular evening meetings. Follow-up work should be made while the meetings are being conducted. For example, between those sessions when rations and feeding methods are discussed and studied, the instructor should visit class members who have problems and give individual help, encouragement, and advice. Later visits then will be a "follow-up" in a very real way. Then the work is a continuation of instruction begun in the class.

A second means of securing the adoption of improved practices is the use of summary sheets of the decisions reached by the class. These summaries should carry experimental reports and technical information so that each class member may have a permanent record and directions, without the need of taking notes in class. The writer has found that references to these sheets are made later

Newspaper reports summarizing decisions and activities of the group and individuals may well be used as a part of the second means of securing the adoption of improved practices.

A third means is to take members to farms where new practices have been adopted. This may be illustrated by citing an experience of the writer this spring in securing follow-up work in the adoption of land terracing. Altho our county is rolling and quite steep in some parts, no terracing had ever been attempted. Four of the class members said at the last meeting in February that they were interested in terracing and might possibly undertake that work this season. None of these men had ever seen terracing, and they seemed to be to the place where a visit to a terraced farm was about all that was lacking to make a certainty of their terracing. We arranged a time when all could get away from their spring work for a half day, and drove to terraced farms about forty miles in an adjoining county. Here they talked with men who had terraced for two and three years, asked many questions about cultivation disadvantages, outlet problems, and so forth. Two of this group terraced in April, while the other two plan definitely on terracing in the fall. The two who terraced are in opposite directions. Neighboring farmers are beoming interested and are studying the new practices closely.

Demonstrations and Tours

Demonstrations and tours, or a combination of the two, should be relied upon wherever practicable since groups instead of individuals can be worked with, and the attendant discussion and observation carry the classroom teaching past the stumbling place into actual application and accomplishment. Most farmers are inclined to hesitate even tho they agree that it is better than the old until they see the job being done. However, no matter how well the group demonstrations may be worked out, a great part of the instructor's influence must be exercised thru individual calls and helps, as was mentioned under the first-named means.

As a final effort before beginning the next season's course, a follow-up meeting in the classroom for discussion of successes and failures, and checking results pays very well. Oftentimes instructors seem to have the attitude that follow-up and checking results are one and the same thing. While often both may be done in the same meeting or visit, the follow-up is, or should be, instructive, with the checking only incidental to it

discussion and questions by the members. A report at this time by every member of the class, together with some checking thru the visits and other contacts, should make up the teacher's record of achievement.

In conclusion, the value of supervised practice with adult classes in vocational agriculture is well summed up in the words of Prof. G. A. Schmidt, "The thing which counts most as a result of vocational training is what the trainees do which is indicative of improvement over what they have formerly done. If the evening school group, after having attended an evening class, does no differently from what it has formerly done, nothing has been gained; conditions are exactly as they were before the work was undertaken; and much energy, time, and money have been wasted. Therefore, in every evening class in vocational agriculture provision must be made to secure assurance that the members of the evening class pursue six months of directed or supervised practice correlated with the instruction which has been offered."

Agricultural Evening Classes in the Gonzales High School

O. F. LUCKSINGER,
Instructor in Agriculture

[*Note.*—The Special Editor does not know in what state Mr. Lucksinger works.]

EVENING classes in agriculture are, in our experience, the most effective means of securing support for the agriculture department of the high school. During the past six years evening classes in agriculture have been offered in this district, and progress has been made beyond the expectations of all of us interested in the work. During this time four evening schools in dairying, two in horticulture, and three in agricultural mechanics have been held. During the six years we have found that certain methods have worked out very successfully, at least so far as we are concerned. To enumerate some of our experiences seems in order.

In securing attendance personal visitation seems to work most effectively. Coupled with this, advertising by means of posters, papers, and sending out circular letters is helpful. Men from the local creamery or fruit house or local farmers help a great deal in putting this job across. Just from a selfish point of view, the agriculture teacher should visit as many farmers as time will permit, in order to get the point of view of other

Experience seems to indicate that in order to maintain interest it is best to offer the course twice a week for a period of five or six weeks, making a total of 10 or 12 lessons. Interest seems to lag, and attendance drops, when classes are held only once a week or once every two weeks.

As to the time of year when the course should be offered, any time seems to be suitable when the farmers are not too busy with work in the fields.

In order to stimulate perfect attendance we have offered a door prize each evening course, usually a milk can donated by the local creamery. In addition three cash prizes have been awarded at the end of the course. Only dairymen perfect in attendance for the 10 or 12 meetings were allowed to compete for this prize. Last year, with an average attendance of 43, 27 dairymen had a perfect record for the 11 months, and, therefore, were eligible for the grand prizes.

We have found it a good plan to have a field day at the end of each course. For the past two years, the chamber of commerce has donated a barbecue when the field day was held. This field day acts as a stimulus to attendance, and at the same time dairymen like to see what their neighbors are doing.

From time to time true and false statements have been made up and handed to the dairymen. These questions were always based on previous discussions. The dairymen were not required to answer them, but it was surprising how many turned in their papers for correction.

At the close of each school a certificate of attendance was awarded to each dairyman who attended 5 or more of the 10 sessions of the class. These certificates are always appreciated by the members, and they feel that it is more comparable to day school.

Results

No doubt some readers will say that all these methods may work, but what about the results? The results of an evening school program cannot be measured over a period of a year or two. However, there are some definite, tangible results which have been accomplished in our valley in six years.

First—Six years ago there were no cow-testing units in the valley. Now there are three units with 6,000 cows on test.

Second—Six years ago there were no free herds in the valley. Now 25 dairymen have herds free from tuberculosis, and a former agriculture boy has a herd free from contagious abortion as well.

Third—Six years ago no feeding program had been adopted. Alfalfa hay was fed. Now concentrates are fed in order to furnish a balanced ration.

Fourth—Six years ago no organization of dairymen existed. In fact all dairymen were more or less suspicious of each other. Now a strong organization holds regular meetings once a month.

Fifth—Six years ago the herd average was 280 pounds of butterfat yearly. Now several herds are averaging over 400 pounds of butterfat.

Please bear in mind that other agencies have been at work for improving the dairy industry, so that not all credit for these changes is due to the evening

Good Evening Courses in Minnesota Schools

G. R. COCHRAN,
Teacher of Agriculture,
New Richland, Minnesota

WE CONDUCTED four evening classes with a total enrollment of over sixty, in and near New Richland, last winter. Two of the groups under Mr. R. W. Olson, who is acting as a special part-time instructor, are taking up farm mechanics and the other two under G. R. Cochran, the regular instructor, are making a study of the subject of farm management. The two groups taking farm management meet in the rural school building of the district where the classes are held, with the meetings lasting from 8:15 to about 10:30 or 11 p. m. One of the classes held is about four miles from New Richland and the other is seven and one-half.

The first group to meet this year held their organization meeting in November, with the second group getting together early in December. The purpose of that meeting was to find out how many farmers were interested in the work and then to decide on the subject that the majority desired to study. In both cases they decided to take farm management for their year's work. The phases of this subject that they are taking up will include the following: farm records and accounts, which includes inventories and cash accounts; farm power, the cost of tractor and horses as a source of power for their crops; crop rotations and the economy of using commercial fertilizers, a new practice in this community; dairy and swine records as applied to their farms; a study of the agricultural outlook for 1931 as it will affect the organization of the individual farm.

As a large number of the men in attendance are planning on keeping records on their farm this year the first meetings were devoted to the study and discussion of this subject so that the men could take the inventory and start the record in January. Mr. R. C. Bevans, who has charge of the University cost account work in southeastern Minnesota, spent one evening with the group discussing that subject and gave the men many valuable suggestions as a result of his experience.

Farm mechanics is being taught for the second year at New Richland. Two classes with an enrollment of 10 and 12 men, meet one evening each week in the school shop from 8 to 10:30 or 11 p. m. One of these classes is taking their second year in farm mechanics. The first meeting of this class was given over to a review of last year's work. It was gratifying to find that they had retained to a marked degree what was given last year. They also stated that they had applied the knowledge gained in last year's class a great many times. Asked what line they would like to take up this year, they agreed that forge work was what they wanted most but motor work, use of the screw plate, pipe fitting, would be welcomed. Naturally there will be reference to last year's work quite often in order to clarify and cinch fundamentals more firmly.

For the first year class the following plan of work will be followed: soldering, saw fitting, belts and laces, rope work,

were all asked why very few had any forges on their farms and they invariably replied that they did not know how to use them or they surely would have one. The second year class is very much interested in forge work. This tends to prove that it is entirely wrong to base a farm shop course on the tools found on the average farm. The second generation cannot be improved by setting up the first as a standard. Such a survey might serve somewhat as a guide. The instructor should possess sufficient intelligence and experience to set up his own standard of practical shop work for the farmer and the boy. One reason why shop work does not go over so well in some places is because the instructor has a sort of a "railroad iron" idea of the whole course.

A large outlay of equipment is not necessary. About five or six jobs are run at one time with two students at each job. This way very little more than one set of tools for each job is necessary. The evening school is made strictly practical by having the farmers bring in saws, pails, drills, axes, and tools of all sorts to repair and fit up.

Activities of Waldo Young Men's Farming Club

L. H. LUKENS,
Vocational Agricultural Teacher,
Waldo, Ohio

THE Young Men's Farming Club holds monthly meetings thruout the year, with one or two short courses during the winter months. Last year, courses were given in farm shop, and tractor repair and adjustment, with an enrollment of 31. This year our course in farm conveniences started the first of November and has met once a week.

The class is carried on by the conference method, with one meeting given to representatives from the local power company. This meeting this year was principally a discussion on rural electrification.

As a class project the members themselves suggested that they purchase and install lights in the vocational agriculture classroom. The one light and pull chain in the center of the room was replaced with two commercial lighting units and a combination switch and convenience outlet were placed near the door. This work was done by the club members who came in on rainy afternoons.

Each year a tour is held, usually in June, on which anyone who wishes may go. It is usually a trip of two to three hundred miles in which we visit outstanding farms as well as other points of agricultural and historical interest.

Four times in the last five years the Waldo Y. M. F. C. has taken first prize at the county fair in the agricultural produce display, open to Y. M. F. C.'s in the county.

Several years ago a spray company was formed here, and a sprayer was purchased. Since then the sprayer has been managed by the club. Spraying is done for about twenty farmers in the community.

The Y. M. F. C. which sponsors these activities was the outgrowth of the short course work given several years ago. Some of the members of the club are also very active in grange and

Farm Mechanics

Fitting the Farm Shop to Adverse Conditions

L. B. NEUMAN
Instructor in Vocational Agriculture,
Imperial, Nebraska

A FARM shop may be defined as a place to construct and repair farm equipment. It has long been recognized that repair work saves money. It is also true that articles made at home are as a rule cheaper. With this in mind one can readily see where the vocational agriculture farm shop may be a service institution that fills a direct need in a farming community. During adverse conditions instruction in money saving construction and repair jobs is decidedly in order.

Thruout the year our farm constituents have turned to us to help them save money. A fifty-gallon drum of harness oil, put in a dipping vat made from a discarded oil drum, served in oiling harness. Scores of sets of harness were repaired and oiled at cost. Six cow hides were tanned into leather by the chrome alum method. Enough leather was made into halters or sold to pay for the chemicals. In this manner $15 worth of leather can be tanned for $3.

Six motors were mounted on pedestals in the school shop for demonstration purposes, at very little cost. Old cars were bought for $10 to $15 and the chassis made into trailers which were sold to pay for the motors. In nearly every case a valuable piece of shop equipment was gained at practically no cost.

Chick feeders in large numbers took shape from packing boxes and crates obtained for the asking or at little cost. Two sets of wagon box irons found their way into the shop to be used in new wagon boxes under construction. A chickenhouse and a garage were built. These projects afforded an excellent opportunity to teach rafter cutting and cement work.

The past year has brought an increase in the number of machinery parts repaired. These items ranged from overhauling combine motors to strap clevises. To take care of the large number of cars brought to the shop for repair, a track was made and installed from T iron found on an old grader at the county yards. The school board allowed $25 to buy a hoist. An electric motor was moved from a discarded pump house on the county courthouse grounds to run a cement mixer to mix grasshopper bait. This motor mixed 80,000 pounds of bait last summer under the supervision of the agriculture teacher, but at present it supplies power to run emeries, rip saws, press drills, forges, jig saws, and a battery charger. These power improvements were all made by vocational agriculture boys and rightfully belong in a farm shop. They teach initiative and motivate the work. Every improvement named could be had at home. The power could be supplied by a gas engine. One of the farm boys has installed the foregoing equipment in his home farm shop.

was used in the grasshopper campaign, for the construction of hopper "dozers." A special type dozer was made to attach to the front of a car. Truly a vocational agricultural farm shop should be in greatest demand during adverse economic conditions.

Experience has taught us that the following shop arrangement seems to give desirable results. Whitewash the entire inside of shop and toolroom, ceiling, sides of benches, and all. Dark shadows and dark corners will disappear. This will also give the shop an orderly appearance. Localize tools and equipment. Have a wall cabinet over a bench for harness repair tools, auto mechanic tools, paint cans and brushes, and so on. On the outside of these cabinets tack charts and literature on the use of the special tools, for example, Atkin's explanation on the size of files to use per number of teeth per inch on saw, and so forth. The boy will read while working. Discarded athletic lockers may supply each boy with a place to put unfinished jobs, also his coveralls.

Have a good place for every tool and insist that it is kept well fitted and in that place.

Third and Fourth-Year Farm Shop at Lamoure

R. B. WIDDIFIELD,
Vocational Agriculture Teacher,
Lamoure, North Dakota

AGRICULTURE students at Lamoure this year are taking a great deal of interest in the third and fourth-year farm shop. Subject matter covered in these courses are advanced concrete, farm machinery, farm buildings, engines, farm electricity, belts and pulleys, plumbing, glass cutting, and farm conveniences.

In the machinery unit a complete study in the classroom was made of the principles of operation, care, adjustment, and repair of machinery. The text used was "The Operation, Care and Repair of Farm Machinery," obtainable free from the John Deere Company. The discussions were well illustrated with the machinery charts also put out by John Deere to supplement the text.

After a complete study of all the common kinds of farm machines, mowers, cultivators, and so forth, were solicited from farmers and implement dealers in Lamoure to be repaired in the shop. More machinery was available than we could make use of for this work. The machines were taken into the shop, completely cleaned with wire brushes and gasoline, and then re-assembled. The machine was then adjusted again as per the specifications of the manufacturer and repainted with the original color and design. The finished machine when turned out could hardly be told from a new one.

The advertising received from this one unit of shop work in the community this year was greater, I believe, than all the shop heretofore.

The Construction of Our Passenger Trailer

R. ROGERS FOURACRE

FIVE years ago when I entered upon my present duties, the upper class agricultural group consisted of three boys. Field trips for this group were easily managed. As this group grew in numbers from year to year, it became increasingly difficult to take the field trips which I deemed necessary to the success of the various undertakings in the classroom. So last spring the upper class submitted several plans for a school trailer which could be attached to my car. These plans were discussed, and the best features of each were used in determining the final details of construction.

During the summer months we scouted around for discarded cars. A 1924 Overland and a 1926 Buick were donated to the boys. In addition the Logan Township school board gave us permission to salvage any parts from two old horse-drawn school busses not used for eight years. From these busses we managed to salvage spring-cushioned seats, glass for the windows, and some panel-boarding for the sides of the trailer.

First, the trailer body was constructed by the farm mechanics class. A frame 10 x 4½ x 5 feet was made of first-grade oak, using 2 x 4's on the bottom and 2 x 2's elsewhere. We salvaged a top from an old buss with sound wood parts. A good grade of automobile roofing was used to cover the top. The sides and front were boarded with half-inch material from the school busses except for four sets of double-deck window lights, 2 x 6 inches, on each side and three hinged windows (two 8 x 8, and one 12 x 12 inch) in the front. The larger window in the center, flanked by the smaller lights directly in the line of vision of those riding on the seats. These windows, as well as two in the rear of the trailer, open inward and may be fastened to the top of the trailer when open. The rear of the trailer, including a central door, 2 x 5 feet, was made of white pine match boarding. Patented fasteners lock the door from inside. Two small windows, 8 x 8 inches, flank the door.

The body was braced at all corners and every 2 feet inside with heavy steel angle-braces. Two rows of 12-inch seats were built along the sides 12 inches from the floor. The spring-cushioned seats and backs from the old bus were next placed in the trailer, having been altered to fit.

The frame from the old Overland was selected for the chassis because it was much lighter than the Buick, and we were anxious to construct a body of great strength and yet keep the weight as low as possible. The rear axle and wheels of the Buick were selected because a heavy axle would be necessary to carry the weight this trailer would

center so that the completed vehicle would tend to lean forward and have no tendency to rear up and kill the traction of my car. High pressure tires were used because they would carry the weight to best advantage. They were 32 x 4½.

The trunk on my car made attaching a problem. The following plan was used: A heavy steel 3-inch pipe was securely fastened to my car by six 8-inch bolts inserted in drilled holes. A universal joint was welded to the trailer frame, and a heavy piece of bolt threaded at both ends was fastened in the universal joint. A hole to admit the bolt was drilled in the center of the steel bar on the rear of my car. Besides the nut on the bolt a cotter pin was inserted as a precautionary measure. As an extra safety measure a heavy chain was run thru a piece of bicycle tire and bolted around the steel bar on my car and around the frame of the trailer so that, if the universal joint should ever break, the chain would keep the trailer attached to the car until it could be stopped.

The trailer was painted blue, with the name of the school in black letters on each side, 6 inches high in gold. A taillight was obtained from an old Ford, power being supplied by a hot-shot battery. In the suspension of the body, side sway was eliminated by using two sets of Buick springs, one set placed at the edge of the body, fastened on the axle by U-bolts, and allowed to float at the ends on wooden blocks which have these outside springs blocked down 5 inches. The second set of springs was placed under the body and fastened on the axle and on the frame of the chassis. These take up part of the strain when the outside ones are depressed about half way. No snubbers were used and sway is not noticeable.

The body was attached to the chassis in the following manner: Pine 2 x 4's were nailed on the under part of the floor so that they would rest on the frame of the chassis. The latter was drilled in 10 places on each side to accommodate ⅜-inch bolts. Bolts were run down thru the floor of the trailer, thru the 2 x 4's and the frame of the chassis, securely fastening the two parts of the vehicle together.

The class project in poultry (broilers and custom hatching), was used to pay for this trailer. The approximate cost was:

Tires	$23.00
Roofing	5.00
Bolts, nails, braces	2.00
Paint	2.50
Welding	4.00
Total	$36.50

The Bureau of Motor Vehicles permits us to operate on a regular small-trailer license fee of $5 since this is a non-profit method of transportation. (Mr. H. C. Fetterolf was kind enough to straighten out all license troubles.)

The trailer proper holds 14 boys, and with the car I have just enough room for my upper class of 20. We traveled to the Farm Show with a full load and averaged about thirty miles an hour. In all, we have traveled 500 miles with this trailer, and we are more satisfied with its performance than we ever hoped to be when it was being constructed. It leaves little to be desired in transporta-

Teaching Farm Home Construction

G. A. SPIDEL
Instructor in Vocational Agriculture,
Waverly, Nebraska

SOME years ago a relative purchased a new home. After the passing of 10 years it became apparent that the house had certain defects that were not noticed when new. A large crack developed in the foundation wall, three of the doors would not shut, and the plaster was cracked about the door frames. Investigation showed that the house was settling, due partly to the fact that it was built upon filled-in ground and partly to the fact that posts supporting it were rotting where they rested upon the basement floor.

In another case a family observed that their house was hard to heat. Altho the furnace was fired to its capacity in cold weather, the family could not be comfortable except at the one register. What was wrong? The house, altho not a large one, had seven windows on the north, a sun parlor on the northeast, an open stairway with the register of the pipeless furnace just below, and no storm windows or window stripping. These cases are typical of features that must be guarded against in building or buying a house.

Farmers are builders and users of homes. Homes built by the past generation are frequently modified by the present generation either as to arrangement or by adding improvements or conveniences such as electric wiring, heating, insulation, water, or bathroom. Surely a study of the factors to be considered in building, equipping, or buying a home is appropriate to the vocational aims of agriculture students. Until recently there has not been sufficient material available for a satisfactory study of this subject. It is the purpose of this article to state some of the objectives of a study of this kind and to point out assignment material that may be used.

Objectives in Teaching Home Construction

To train the boy to select a desirable location for the home and to plan the arrangement of the farmstead.

To teach the boy to plan a convenient home arrangement.

To teach the names and uses of the various structural parts of the house.

To train the boy to judge the structural features of the house.

To teach the relative value of the common building materials.

To teach the boy to recognize good exterior construction.

To teach the boy to judge the plumbing, the heating system, and the electric wiring of the house.

To teach the heating economies and comfort resulting from home insulation and weather-stripping.

To teach the relation of ventilation to comfort and health.

To teach the relation of humidity to health, comfort, and heating economy.

Material leading toward all of these objectives can be secured from the following publications:

How to Judge a House. Report of the National Committee on Wood Utilization, United States Department of Commerce.

Designs for Kansas Farm Homes. Engineering Experiment Station Bulletin 23, Revised.

Humidity in the Home. Bulletin No. 1 and *Air Motion in Home Cooling and Home Heating*, Bulletin No. 2, Holland Institute of Thermology, Holland, Michigan.

House Framing Details. National Lumber Manufacturers Association. Washington, D. C.

Activities

Application of the principles learned in these studies can be made by visits to farm homes to inspect plumbing, water, sewage, heating systems, and electric wiring. A visit could profitably be made to a house in process of construction. Members of the class could also write to dealers and manufacturers for catalogs and literature describing heating and water systems.

Instruction by Means of Signs in the Shop

W. C. DORR
Instructor in Vocational Agriculture,
Nehawka, Nebraska

THE axiom which contends that one remembers much more of what he sees than what he hears probably conveys considerable truth. As a rule the vocational agriculture teacher has placed emphasis on the use of charts, movie reels, as well as other illustrative material but has neglected the use of such effective methods of teaching in the farm shop. For this he may be justly criticized.

In the Nehawka shop may be found various illustrative materials as signs attractively printed on boards painted in two colors. On one side of one sign is the following in large letters:

CAREFUL PLANNING
PLUS
CORRECT SKILLS
EQUALS
SUCCESSFUL PROJECTS

The boys have learned by experience that the statement is true. This sign serves as the climax for all the instructor has emphasized concerning the value of plans and the acquiring of skills.

The sign is conveniently placed so that when any project is about to be started a glance upward and the whole lesson is brought to mind. "I must plan this project carefully and then be careful in doing my work, and I'll have something of which I can be proud," probably runs thru the boy's mind, particularly if his first one or two projects haven't been good. And then the boy may look in another part of the shop and see the sign, which was put up by co-operative agreement with the boys. It says this: "I Am Proud of Every Bit of Work Which I Do in This Shop." Thus the two signs go hand in hand in the lessons they put across.

On the other side of the first sign are the words "Farm Mechanics" and underneath "Doing by Learning" in smaller letters. This is placed so that anyone coming into the shop instantly realizes that the place is alive and that

Future Farmers of America

Bulletin Board, Future Farmers of America

THE development of agricultural leadership is the main purpose in this organization of Future Farmers of America. A number of state associations are providing for leadership training conferences in connection with a summer camp for F. F. A. members or as a part of the annual state convention.

1. In Maine, for example, during the week of June 26 some fifty F. F. A. boys selected from the various chapters in the state assembled with their local advisers at the state Y. M. C. A. camp at Winthrop for a week of leadership training. These boys studied and discussed ways and means for developing rural leadership and received instruction in such subjects as public speaking and parliamentary practice. Along with this work those present also had the advantages of a summer outing and some splendid recreation on the shores of a large lake where this camp is located.

2. At Oakland in Garrett County, Maryland, a summer camp for F. F. A. members was held July 15–17. Similar camps where rural leadership training was the main theme were scheduled at Pollock, Louisiana, the week of July 25 and in New Hampshire during the last 10 days of August. Texas had a system of district camps scheduled thru July and August at various locations in the state.

3. Some of the states holding annual conventions of Future Farmers of America during June were Ohio, Virginia, North Carolina, Arkansas, and Florida. The Georgia state convention was scheduled for August at Athens.

4. The North Dakota Association of F. F. A. has at present 37 chartered chapters and 565 paid up members for the year ended June 30; 14 splendid activities are listed on the 1932–33 program of work. Arley Hovland of New England, North Dakota, won the state Public Speaking Contest for F. F. A. members at the recent state convention, and Dean H. L. Walster of the Agricultural College was honored by the boys in being elected to the degree of Honorary State Farmer.

5. A report from Ohio shows that over 1,800 F. F. A. members in that state were present at the state convention held early in June; 37 boys received the degree of State Farmer, and 1,500 competed in the vocational dairy cattle and poultry judging contests.

6. In Illinois, the Mahomet Chapter of F. F. A. is developing a special egg market to dispose of the eggs produced in connection with the farming activities of the members. On March 1 the boys began marketing fresh, large, candled eggs to the fraternity houses in the Champaign-Urbana district. Since that time the chapter has sold over 535 dozen eggs at a price which netted the producers about 4 cents above the ordinary price received by the farmer. Low production costs, a quality product, and a steady market made this undertaking successful.

7. The Kansas Association of F. F. A. has shown a growth of 37 percent during the year just closed. There are 84 chartered chapters and over 1,000 paid up members in the Kansas Association.

8. The Montana Association has also shown excellent growth this past year. There were 990 boys studying vocational agriculture in the state, and 719 were F. F. A. members.

9. The Alachua Chapter in Florida has designed and is using a colored label for marketing the agricultural produce of its members. The label is 4½ x 8 inches, bearing the reproduction of garden products, the name of the chapter, and the F. F. A. insignia. This is an example of some splendid training in orderly and effective marketing.

10. What F. F. A. boys actually do after they have completed their systematic instruction in vocational agriculture and gone out from high school is an important matter. Here are some interesting results from Iowa. Out of 18 boys who were elected to "Iowa Farmer" degree in 1929 and 1930, 11 are farming and 2 are in the state agricultural college.

11. Waldon Denny, 16 years old, F. F. A. member of Placer Union Chapter at Auburn, California, was recently elected president of the adult Mount Vernon Farm Bureau center—the youngest such officer in the state. Waldon is a California farmer, an outstanding boy in project work, and a real community leader, and his election to the leadership of a group of adult orchardists and farmers was a direct result of his showing and training in vocational agriculture and the Future Farmer organization.

12. The annual reports of the state associations of F. F. A. to the national organization for the year ended June 30 were due August 1. Interesting data will be compiled from these reports for Bulletin Board presentation on future programs. State officers are urged to send in the annual reports promptly.

13. The Western states F. F. A. radio program conducted monthly from California has recently been changed from the first Friday of the month to the first Saturday of each month. The time of this program is 12:15 to 1 p. m., P. S. T.

Call for National F. F. A. Convention

To the State Officers of the Future Farmers of America:

The national constitution of the Future Farmers of America provides that a meeting of the national organization shall be held annually at a time and place determined by the National Board of Trustees, and that the President shall call such a meeting in accordance with this provision.

As President of the Future Farmers of America, I am therefore issuing a call for the Fifth Annual National Convention from November 14 to 18 at the Baltimore Hotel in Kansas City, Missouri. The Convention will be held in conjunction with the Seventh Annual National Congress of Vocational Agriculture Students which takes place at the time of the 1932 American Royal Livestock Show.

Each chartered State Association of F. F. A. in good standing with the national organization is entitled to two official delegates to the national convention. It is my request that the officers of each State Association make plans immediately for delegate representation and urge as many members and friends of the organization as possible to attend.

—KENNETH L. PETTIBONE.

Every F. F. A. boy should try to win the American Farmer degree.

The national F. F. A. program is heard on the N. B. C. National Farm and Home Hour every second Monday in the month. The next

New Jersey F. F. A's. Build a Student Poultry House at the College of Agriculture

THE F. F. A. radio talk during the National Farm and Home Hour on May 9, by the New Jersey boys, was a meeting of the State Executive Committee. In this talk the following conversation took place:

The Treasurer. "Mr. President, I have a suggestion to offer. You remember the last time we were at the agricultural college we visited the students' poultry-houses, where several college boys keep poultry to help pay their college expenses. You know, all those boys are former vocational students and F. F. A. members, and they are really continuing their high school poultry projects while students at the agricultural college. The money to build those houses has been contributed by county bankers' associations and the short course department of the agricultural college. I have learned, too, that there are more applicants for the use of poultryhouses next year than there are houses. Since Future Farmers use the houses, why wouldn't it be a good plan for the boys of the local chapters to help build another one this summer? I talked to Professor Thompson, the poultry husbandman, last week and he told me that the material for a 20 x 24 house could be bought for $300 or less. We have that much money in the state treasury. Why not use it to buy the materials for a poultry-house and have members from the different chapters build it? Suppose, for example, that a local adviser and an auto load of members would drive up to New Brunswick for a couple of days and work on the house, and then boys from a different chapter would take their turn, and so on. Professor Gross, the agricultural engineer of the college, would superintend the work. By following this plan we could build the house in a short time, and it would be built right. We could call this the state F. F. A. house and keep it for the use of some member who wants to attend the agricultural college but hasn't enough money to pay his expenses. Our state adviser approves of the plan, and I shall be glad to know what the other members of the executive committee think of the idea."

The President. "Well, Mr. Treasurer, this would be a big undertaking for us. Are you sure we could carry it thru?"

The Treasurer. "Yes, I am sure we can."

The Reporter. "Mr. President."

The President. "Mr. Reporter."

The Reporter. "Mr. President, the Future Farmers of New Jersey have never fallen down on a big proposition yet. If we build this poultryhouse, the people of the state will know that the F. F. A. of New Jersey is a live organization, accomplishing worthwhile things along agricultural lines. I move you, therefore, that the president, the secretary, and the state adviser prepare a detailed report of the matter and present it at the state convention."

The President. "You have heard the motion. Is there a second?"

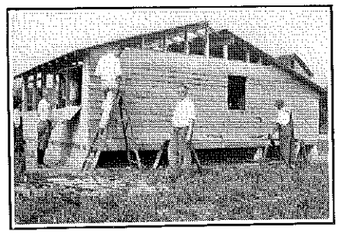
The Secretary. "I second the motion."

The President. "Any discussion? All in favor, give the usual sign."

All. "Aye."

come a reality. The material was purchased and boys and teachers from different departments came on different days and built the house, which was finished on July 15. Next September, Walter Cobb of Salem, a State Farmer of last year, will use it to house 125 Leghorns he has raised for this purpose, and will apply the profits toward helping to pay his expenses during his freshman year as a student in the college of agriculture.

The New Jersey boys are proud of this house and consider the securing of the necessary funds and the building of it by pupil labor a worthy F. F. A. accomplishment.



New Jersey F.F. A. Student Poulty House Under Construction at College of Agriculture.

Funds to buy the material were provided from the State F. F. A. Treasury. The house was built by F.F. A. members

Florida Future Farmers Hold State Convention

J. W. DOBSON
Reporter, State Association, F. F. A.

THE Florida Association, Future Farmers of America, staged its fourth annual state convention at the University of Florida, Gainesville, June 28, 29, and 30.

Both the recreational and educational features of the program seemed to fill a definite need in the lives of the 291 farm boys present.

While livestock judging contests, the basket-ball games, the swims in the university pool, and the official meetings of the state convention were all most interesting and educational, yet probably the most outstanding features on the three-day program were the public speaking contest, which was staged in the university auditorium, and broadcast over WRUF, state radio station; and the Future Farmer banquet held in the university cafeteria immediately after the public speaking contest. Byron Bodeford, Altha, won the speaking contest and will represent Florida in the regional contest this fall. A feature of the banquet was a fiddling contest won by the Chiefland Chapter.

Eight boys were elected to the degree of "Florida Planter," and awarded the state key and certificate. In addition, four honorary Florida Planter degrees were awarded in recognition of the recipients' services to vocational agriculture and the state association. The honorary Planters elected were:

Mr. J. C. Sellers, Editor, Farm and Live Stock Record; Major W. L. Floyd, Assistant Dean, College of Agriculture; Dr. J. W. Norman, Director, University of Florida Summer School; Mr. L. J. Larson, Master Teacher, Florida, 1930–

Indiana Association of F. F. A. Adopts Uniform Thrift Account Record

W. A. SMITH,
State Adviser

ONE of the problems confronting the F. F. A. chapters in Indiana in their organization of thrift clubs was the manner in which accounts should be kept. This problem was considered by the state association, and a record form was prepared. In order to increase the usefulness of the form, it was made to include the member's financial record in addition to the thrift account record. The boy could use his account book to record deposits of money earned in farming, money checked out, investments in farming together with an inventory of these investments at the end of the year, other productive investments, and liabilities. All of these items are in addition to his record of regular deposits in his thrift account. A complete summary of all of these items at the end of the year provides the boy with the financial information necessary to his advancement in the different degrees of membership in his organization.

This account book was discussed with the officers of the State Bankers' Association in Indiana and they thought so well of the plan that they offered to print the books for the boys. Credit for this action of the Indiana Bankers' Association is given on the back of the account book. When any local chapter presents the idea of a thrift club to a local banker it is an advantage to be using an account book which has been endorsed and furnished by the association of which that banker and his bank are members. A closer bond between Indiana F. F. A. and the bankers of the state has been created.

The cover of the account book has been prepared in the colors of F. F. A., with the seal of the organization on the front and the creed on the inside front cover. The book has been copyrighted in the name of the Indiana Association of Future Farmers of America.

Collegiate Chapter of Future Farmers of America Organized in Oregon

JESSE L. RIFFE, Reporter

REALIZING the growing importance of the Future Farmers of America and the consequent duties involving upon the teacher of agriculture as a cahpter adviser, the students of agricultural education of the Oregon State College met in December and organized a Collegiate Chapter of F. F. A., primarily for the purpose of learning by doing the duties of chapter advisers. Fourteen members now belong to the organization. We set our standard at 100 percent paid-up membership in the department. A program committee was appointed to formulate a list of activities. At our second meeting we outlined some activities and objectives to be carried out. We shall endeavor to develop a model chapter for Oregon. We have no desire to become a member of the national organization nor do we wish to be considered as competitors of our younger brothers. We shall attend the meetings of our local chapter and we

active chapters each year. We shall take part in the supervision of projects of boys in the local high school and practice grading the records and field work of these boys. Other activities will include the fostering of a radio program, debate practice, assisting state conventions, conducting typical F. F. A. meetings, and conducting a publicity program such as project tours for business men's clubs to interest them in the vocational agriculture work. At our next meeting each member will choose one of these activities and give a three-minute talk on it.—From the Vocational Oregonian.

My Plans for Becoming a Farmer

(Continued from page 40)

I have been in agriculture for three years. During this time I have built up to where I now own 1 producing cow, 1 heifer, and 2 heifer calves. I have grown an acre of corn part of which I sold as seed corn, and I am planting 3 acres this year. I also own 1 purebred Tamworth gilt to be bred soon. I have kept accurate records on all my projects. It might be interesting to give the results of three of my projects.

The total costs of raising a dairy heifer were $48.49 with 41 hours of labor. During the two years I showed her in two shows, the first year at the Navajo County Fair in which I got first in general class and second in showmanship. My premium was $4. The second year in the local F. F. A. show I got first in both showmanship and general class.

I bought my Tamworth gilt at weaning age with an offer from the Tamworth breeder of being awarded another weanling gilt if I made my gilt weigh 180 pounds at 6 months of age. When we weighed her she tipped the scales at 234 pounds. I will breed her the last of May. I also plan to show her and her litter at the state fair providing she farrows out well

A year ago I rented an acre of land for $14. I paid this rent charge in labor. Horse labor and the first plowing were included in the rent. I planted 4X corn May 23 with a drill planter. I got a good stand. In September I gathered and stored 500 pounds of seed. During the winter I shelled and graded my seed. I made a germination test and found it tested within a fraction of 100 percent. I have sold part of this seed for 4 cents per pound and have sale for the remainder of it at that price.

Mothers to Be Guests at F. F. A. Conference

H. D. ELDRIDGE,
Vocational Instructor in Agriculture,
Greeley, Colorado

THE F. F. A. conference, including fathers and sons interested in agriculture, which meets weekly at Greeley High School, will meet Wednesday evening with mothers of the boys as guests. The meeting will be in the agriculture room at 7:30.

Project work in vocational agriculture will be the chief subject for discussion. A boy will talk about its requirements and his own project. Films taken by Mr. Eldridge will be shown by him; they

Instruction by Means of Signs in the Shop

(Continued from page 45)

some sort of lesson is being taught by something the boy can see.

An opportunity is afforded by means of the farm shop to also place on signs and charts some of the instruction taught in the regular classes. It is here that the painting may be done.

Our program calls for advertising one's farm by giving it a name, placing this on a large sign at the entrance. It lends dignity. We encourage our boys to print signs for their projects and for protecting places from hunters, agents, and the like. Is it not as logical to place signs in the shop to emphasize to beginners the lessons they must learn?

Educators point out the value of illustrative material in the classroom. Businessmen realize the cash value of effective sign advertising. It has a place in the farm shop as well as in the agriculture room. If one wishes for variety and constant attention, he has but to make the same lessons he wishes to put across by using charts and hanging them in place of the signs. These he may change as the different units of instruction are considered and the jobs demonstrated and practiced.

Third and Four-Year Farm Shop at Lamoure

(Continued from page 44)

and Carter as a text the advanced shop class has made a study of building materials, planning farm buildings and farmsteads, roofing materials, cost estimating, roof framing and rafter cutting, the mechanics of building, steps in building, and the details in building the common farm buildings. At the time of taking up building materials the class made a field trip to the local lumber yard where they studied the materials studied in the classroom.

This unit will be completed soon by a class project in building a 10 x 14 poultry brooder house for one of the members of the class. The rafters and framing will be cut in the farm shop and the building put up outside as soon as milder weather comes.

Farm engines will be taken up this year also for the first time. The principles of operation, care, repair, and adjustment will be studied and repair work will be done in the shop in the same manner as with farm machinery.

The shop work in the other units taken up in the advanced course is being worked out in the same way with the idea in mind of keeping it as practical as possible. I have found that the boys take a greater interest in this course than in any other course offered.

Young Chapter Has Fine Record of Accomplishments

CLAUDE C. COUVILLION

THE Terrebonne Chapter, Houma, Louisiana, altho organized at the beginning of the school year, was not chartered until January, 1932. The boys entered into the spirit of F. F. A. and by May the accomplishments for so short a time seem outstanding. Among the accomplishments may be mentioned

made butterfat tests of 27 samples of milk for farmers, published 9 issues of a Terrebonne Farmers' Market Bulletin, transplanted 85 live oak trees along the Old Spanish Trail Highway, transplanted 1,000 slash pine, 300 live oak, and 200 elm seedlings, in a nursery for future use in beautifying the town and highways, pruned and sprayed 20 shrubs on the school grounds, pruned 225 fruit trees in the community, and sprayed 85 of them, sprayed 8 camphor trees on the courthouse square, and grafted 10 pecan trees.

The members of the chapter have purchased co-operatively, 800 purebred chicks; ¾ of 1 ton of chick feed; 2 tons of certified seed potatoes; 1 ton of complete fertilizer. They have helped the other chapters to purchase the state F. F. A. camp site.

The chapter was represented at both district and state fairs and competed in the livestock and corn judging contests. The team won several first places at the district fair and was in the finals at the state fair. A local community egg show was staged at the schoolhouse by the boys.

Every member has presided over a chapter meeting to gain experience in parliamentary procedure. The chapter is one of the first in the state to send an entry for the National F. F. A. Chapter Contest. It has published seven issues of the chapter news letter and has sent a copy of one issue to every state adviser.

For recreation an all-day fishing trip was taken Thanksgiving. A father and son banquet was held. The boys took part in a county-wide potato tour. They have visited the field of a Master Farmer who resides in the county, and examined what was said to be a perfect crop of English peas. On this trip they were entertained at dinner by the Rotary Club at which time the F. F. A. boys gave the members an idea of vocational agriculture teaching by staging several demonstrations that showed some of the practical features of the instruction.

The boys are very much interested in chapter work and are planning greater accomplisments in the future than have been possible this first year.

Prosperity Cow Circle

ABOUT a month ago we decided to start a Prosperity Cow Circle in our chapter, using the plans of the Blue Valley Creamery Institute. The members of the circle test their home herds and one or two herds belonging to neighbors. We go to the farms once a month and take samples of milk and weigh the feed for each cow. Then we take the samples to school, test them for butterfat and determine the cost of production. In this way, the farmers can tell which cows are paying and which are not. We charge the farmer a small amount for each cow tested, to pay for the acid and other equipment used. At prosent, we have nine boys enrolled in our circle.—Frank Hodges, Reporter, Stonington Chapter.—From The Illinois Future Farmer.

Future Farmers in Superior, California, own 250 brood sows, offspring from which will presumably amount to 15 to 20 carloads of barrows next year. The