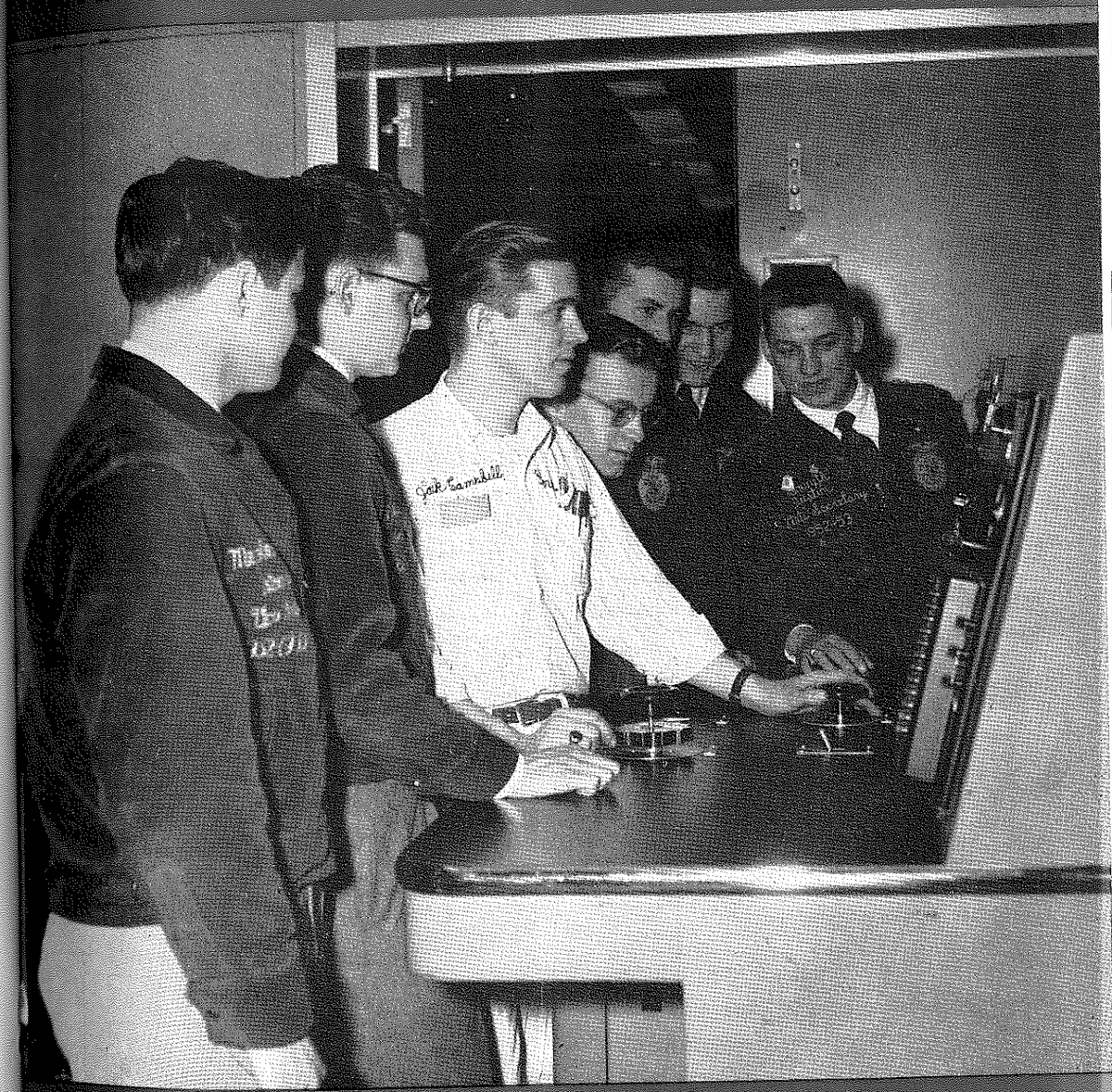
The Agricultural Education Magazine

INDEX OF AUTHORS

July, 1953 - June, 1954

The AGRICULTURAL EDUCATION *Magazine*

JULY, 1953 NUMBER 1



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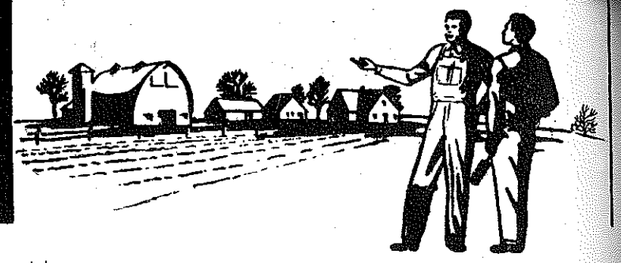
Featuring . . .

Growth in the Program of Vocational Agriculture

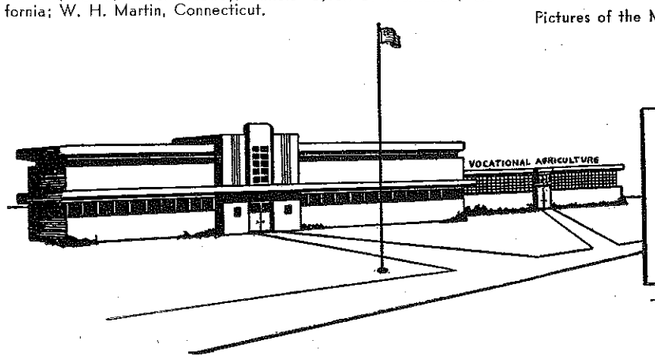
The Agricultural Education Magazine



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 Interstate Printers and Publishers, Danville, Illinois.

The Interstate Danville, Illinois

Contents



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Guest Editorial . . .

T. W. GLAZE, Director, Agricultural Research Department, Swift and Company, Chicago, Illinois

Have you noticed how some new developments catch on with a bang? At first it looks as if almost everybody is going to pick up the idea and put it to good use.

The "fire" burns brightly . . . for a while. Then it seems to flicker and sputter, and almost goes out. For some unknown reason, progress slows down to a crawl. It makes you wonder what happened to your program that started off so well.

If you have had this happen to you, then you have bumped into the problems of changing people's habits. It is the same problem that concerns educational leaders as well as many industrial sales organizations.

Your job as an agricultural teacher and leader is actually a sales job. You are selling ideas . . . ideas that will help the individual farmer or rancher do a better job.

The sales force that considers farmers and ranchers their customers have a similar selling job. And, they have the same kind of problems you have. When bucking up against the problem of habits . . . they've had their "fires" flicker and sputter too. In fact, almost every manufacturer wants to know how long it takes for farmers and ranchers to find out about a new product . . . or, a new idea. And, how does he learn about it?

Of course there are no final answers, but there are some clues that have been provided by some recent tests completed by agricultural colleges. You, too, can probably put some of these clues to work.

Almost everyone is familiar with the meteoric rise of antibiotics and their use in livestock feeds. It was worked out several years ago. A few stories appeared in 1948 and 1949. Then the "fire" broke into a full fledged blaze in 1950. Everybody was talking about antibiotics . . . agricultural teachers, college professors, farm radio people, farm magazine editors and advertisers.

How much effect did two years of the most intensive program ever seen in agriculture have on hog producers? Well, to find out, the Statistical Laboratory at Iowa State College interviewed 600 farmers in the fall of 1951. They found out that 62 out of every 100 hog producers in Iowa had heard of the practice of using antibiotics in hog feed . . . 38 still hadn't heard about it. About 55% were actually using hog feed with antibiotics in them.

A lot of folks who had spent a lot of money on advertising, editors who had written many articles on antibiotics, and many others, were disappointed to hear that after two years, almost 4 out of 10 Iowa farmers still hadn't heard about antibiotics in hog feeds. Yet when compared with the adoption of hybrid seed corn . . . or, the use of organic dusts on cotton in some areas, this was speedy work.

What does this mean? It means that you cannot expect to change people overnight. It means that it takes much longer than most folks think to get

(Continued on page 22)

In this issue...

To take a look at our job as others see it, read Sup't. Nickel's appraisal on page 4. It will help you to get your "feet on the ground" in conducting your program. Dr. Juergenson's challenging article is in somewhat the same vein as he urges us to keep up to date in identifying the services to be performed in vocational agriculture.

Those of you who need better facilities for your departments will be interested in the procedure and results obtained in the Akron, Colorado community as reported by Paul Butterfield. Better facilities are one means of providing for growth in programs of vocational agriculture. The plan for establishing departments in Mississippi, reported by Troy Majure, deals also with the question of facilities.

Photography is one of the neglected means for promoting vocational agriculture as well as providing a means for obtaining desirable teaching materials. Professor Coggin gives some excellent advice, well illustrated, in his plea for improving snap-shots. Incidentally, the Magazine could benefit greatly if you will follow his advice in taking pictures and sending them in to illustrate your articles. This applies especially to the Picture of the Month Contest.

Supervised farming terminology is far from uniform among us. Professor Armstrong has proposed definitions of our every day terms which should help us become a little more up-to-date in our thinking as well as in our terminology.

Much concern is felt and expressed regarding the intentions of our students with regard to farming as an occupation. Walter Bioraker reports his attempt to arrive at the factors associated with desire to remain in farming. The procedures he used, as well as the results, should be of interest to others who may wish to work on the problem.

Many teachers devote time to the preparation of judging teams. A. E. Frazier gives us the benefit of some of his successful experience in working with dairy judging teams. His emphasis upon the opportunity for teaching as a part of training good judges is worthy of notice. Ralph Mowrer emphasizes the same theme but in connection with a variety of contests and exhibitions.

The index to Volume 25, which ended with the June issue, is located in this issue so that it can be "lifted" out if anyone is interested in having it as a separate section apart from the issue as a whole. Please note the analysis of the contributions during the past year by contributors, by States and by Regions.

This issue of the Magazine initiates a new Volume. A quarter century of unbroken publication has been due to the high degree of professional interest manifested by all who work in agricultural education. Volume 26 gets underway with a view to meriting the continuation of your support.

A comprehensive analysis of . . .

The place of vocational agriculture in the public school system[1]

Dr. Vernon L. Nickel, State Superintendent of Public Instruction, Illinois

Superintendent Nickel was born and raised on a farm and has been in educational work for 40 years, as a teacher in a rural one-room school and a city school, as a school administrator and for the past 10 years as State Superintendent.

I BELIEVE it important that all of us who are engaged in educational work, take time out occasionally to evaluate what we have done, restate our purposes, and clarify our objectives. You men are specialists in the teaching of a particular vocation. You are primarily interested in teaching young men and adults the science, the skills, the knowledge and all that is necessary for successful farming. When I say "successful farming," I use the words in a broad sense. You and I are interested in teaching these young men to take their places in a rural community as good citizens who are able to earn a satisfactory income from farming.

Your view point must be that of a teacher. You are not an agricultural technician, an extension worker, or one who administers agricultural programs. Your job is to teach. It is important that you analyze your activities and concentrate on the job for which you are employed—the job of teaching rural youth and adults for successful rural life and citizenship.

As teachers, we must be interested in the complete educational program of the school—not just our own special department. Our objective should be to fit our special program into the school's educational program so that all boys and girls may have an opportunity to get the most out of their schooling. Too often, the teacher forgets the needs and the desires of the student in his ambition to build up the enrollment in his own department. The "master teacher" of vocational agriculture thinks in terms of improvement for all the rural people of the community—not just those who plan to farm.

Comprehensive Program

The public school in our society is charged with the responsibility for providing a comprehensive educational program available to all of the people. To have a comprehensive program, the needs of individuals and the community must first be determined and then an educational program provided by the school to meet these needs. In other words, not just any kind of an educational system will produce the enlightened citizenry necessary in a republic. The education cannot be merely in terms of books, credits, diplomas and degrees, but it must be education for living a life as well as preparation for earning a living. Every person must recognize that all boys, girls, and adults need the kind of an education which will make them good citizens, intelligent consumers, and efficient producers.

[1]Excerpts from an address before The North Central Regional Conference.

Vocational education is not a thing apart. It must be an intergral part of good education if education is to meet the accepted aims and purposes. The development of each student must be continuous and integrated. It will fall short of the vocational aim unless at certain points and under certain conditions, conscious, honest and insistent attention is given to the training and development of skills necessary for vocational success. Vocational education is for everyone who works, and everyone in a republic should work.

Vocational education, the oldest form of education known to man, is necessary as a means of competing in the struggle for existence and for human progress. In this modern world of ours, standards of achievement are so high and competition so keen that the untrained person has small chance of success.

Wide Range of Pupils

The secondary school cannot confine itself exclusively to preparation for entrance into professions; neither can it be limited to the education of youth in full-time attendance. The high school of today enrolls a far different cross-section of youth than did the high school of fifty years ago. The high school now enrolls students with a wide variety of abilities, economic backgrounds and vocational interests. When we look at the occupations in which adults in our community, State and Nation earn a living, we begin to see the importance of adapting our high school program to meet the needs of all youth.

High school students may be placed roughly in three major classifications: (1) The student who attends high school in preparation for entrance into college or some other advanced schooling. (2) The student who does not intend to go to college and who has not decided on an occupational field after the completion of his high school education. (3) The student who is not planning attendance in full-time school beyond high school and who has made a tentative choice of his life work.

The fields of vocational education have a major responsibility for most of the pupils of the latter two groups. It also has a responsibility for many persons of the first group who may attend college.

The school administrator who knows for whom the vocational education program is intended will not limit the program to any ability level. Not all who lack interest or rebel at courses and subjects offered them are subnormal individuals. Many simply have different or stronger ideas about what they want, or their natural capacity is in other lines. Not all students of exceptional mentality are ordained for the professional careers. Many with above-average minds cannot afford a long period of formal education because of economic pressures. Vocational education must be made available to all students. All vocational students must have the intelligence and ability to profit from the instruction given for the occupation involved.

A school should provide an uninterrupted program of instruction in agriculture—for the in-school youth who needs instruction in agriculture to lay a foundation for his farming career; for the out-of-school young farmer who needs systematic instruction dealing with the problems of becoming established in a farming occupation and finally for the adult farmer who needs an educational service which will keep him informed on the latest developments and the most recent approved practices that affect the enterprises in his farming operations.

Selection of Students

High school students who are to be enrolled in vocational agriculture should be selected carefully to insure groups of farm boys who are interested in farming and who plan to become farmers. Students must understand that vocational agriculture is a vocational course and has as its objective "establishment in farming." All members of the class should have facilities for conducting supervised farming programs with sufficient size and scope to contribute to the teaching of the knowledge, skills, and judgments necessary for successful farming. Of course, the interest of the students should be given a major consideration. Quite often, a boy with an intense interest in farming but with poor facilities at the start for a supervised farming program, becomes an outstanding student while in school and develops his farming program to the extent that he is able to get established in farming.

The Future Farmers of America

The Future Farmers of America has done more to focus the attention of the public on vocational agriculture than any other feature of your program. It takes the work of your department in the full view of students, parents, rural people, and city people. Everyone is interested in the activities and accomplishments of the Future Farmers. The State newspaper clipping service forwarded to our office, in one month alone, more than 500 newspaper stories dealing with the Future Farmers of America. Fairs, radio programs, civic clubs, etc., feature the FFA. This organization has caught the interest of the public, has added incentive to the students to improve their work, and furnishes the school and the agriculture teacher an enthusiastic rural youth organization which is glad to work

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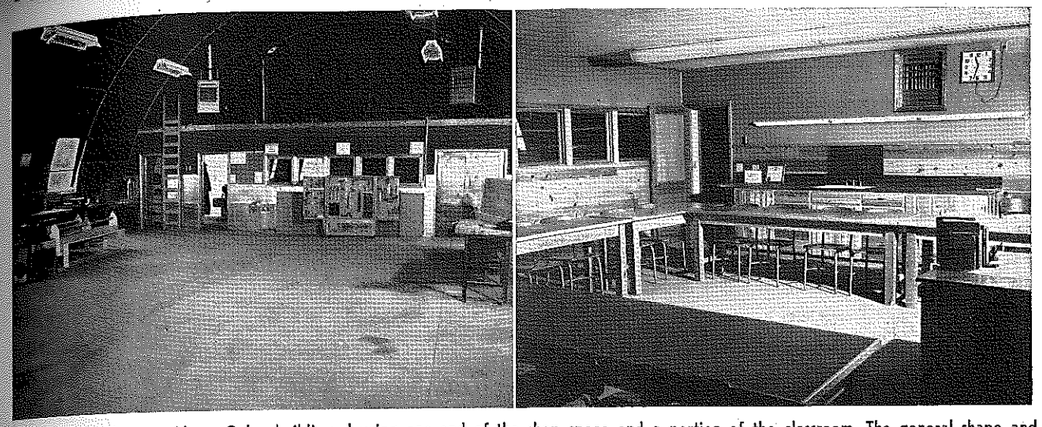

Two views of the new Akron, Colo., building showing one end of the shop space and a portion of the classroom. The general shape and construction of the building can be seen from these interior views.

Our community financed an agriculture building

PAUL G. BUTTERFIELD, Vo-Ag Instructor, Akron, Colorado

Paul G. Butterfield

OUR TOWN has a new, entirely modern vocational agriculture building costing $15,000. This all came about as a result of a new plan now gaining wide acceptance throughout the western states. The chief advantage of the plan is that the money was raised, the building built, and everything accomplished without the necessity of a bond vote by the people of the district.

Our county system, comprising 2,100 square miles of high plains non-irrigated farm land, has the shadow of reorganization hanging over its future. With the situation as it is, there is great doubt if any bond issue for such a building program would carry.

At one time there were 7 or 8 vocational agriculture departments in the high schools of the county. Depression, drought, lack of qualified teachers, and short budgets had gradually eliminated them until by 1952 none were left. Where and how to start again was a problem.

However, demand in a primarily agricultural community for the benefits of the Ag program brought a huddle in which a plan, now widely adopted, came into being.

Community Representatives Organize

Farmers and businessmen, interested in keeping worthy boys on farms, and at the same time insuring the future of agriculture in the county, met to draw up a plan of operation. Some of the people who were farsighted enough to see this need were: Superintendent M. C. Nolte of the Washington County High School System; Bertin K. Bateman, farm planner of the soil conservation; Fred Fassler, Sr., farmer and school board member; John Holtorf, farmer who later became president of the organization; Louis Fassler, businessman who was building committee chairman; Fred Fassler, Jr., W. C. Hayes, and Del Venrick.

Since hope of voting bonds was out, what procedure could be used to obtain money with which to build a building?

A committee called on Sam Chutkow, a lawyer and friend of agricultural education. What could Sam do to help them with their plan?

Mr. Chutkow, who worked out most of the details of the plan, went to work. The first step was to organize the supporters of the plan into a non-profit corporation under the laws of Colorado. This involved a constitution, by-laws, a board of directors, and the printing of bonds, or shares of stock in the company. The name chosen for the organization was the Vocational Ag Club, Incorporated, with a board of directors of seven members, plus the high school superintendent and the vocational Ag man as ex-officio members. The number of shares was to be 150 one hundred dollar shares, or a total of $15,000. Anyone purchasing a share was to have a vote at the annual meeting, but no one person, no matter how many shares he owned, was to have more than one voting share. As wide support as possible was provided, in order to gain moral, as well as financial, support for the plan. The group felt that the more people who had money invested in the venture, the more support they would give. A total of 49 different individuals purchased stock in the company, with most of it coming from one or two large investors.

A Building Committee

A building committee next took up the actual planning of the building, with the school board, the state supervisor of agricultural education, Al Bunger of Denver, and with various contractors. After the plans were agreed on by all parties, the actual work of getting the work done rested with L. E. Fassler, building committee chairman, who did an excellent job of translating into reality the wishes of the community. The first meeting was on April 1, 1952, and the date of July 1 was set for completion. However, due to certain shortages of labor and materials, it was not completed until in time for the opening of school in September.

An Agreement Made

An agreement was drawn up between the two corporations—the Vocational Ag Club, Inc., being the landlord; and the Washington County High School District, the tenant. This agreement, called an Indenture, was essentially like any other lease with the additional provisions as follows:

1. The school district would pay rental for 10 years on the building at the rate determined in the Indenture. At the end of that time, the rental would equal the cost of the building, which would then revert to the tenant and title would change hands at that time.

2. The tenant, in this case the school district, would provide insurance, operation, such as gas, water, and electric power, and maintenance, as well as providing a vocational Ag teacher for the department. Any changes in the building would first have to be approved by the landlord.

3. The annual payments were set forth specifically in the Indenture, and could be retired at the end of a five year period. This was to enable the district to allow retirement if they had the money at any time after the five year period was up.

4. Any money paid to stockholders would be on a prorated basis annually, depending on the number of shares held.

An Example for Others

After dedication and appropriate ceremonies on the evening of October 30, 1952, the Akron Vocational Ag Building stands as a monument to the ingenuity

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How to **Improve your snap shots**

A few simple precautions can make a difference

J. K. Coggin, Teacher Education,
N. C. State College

Picture No. 5

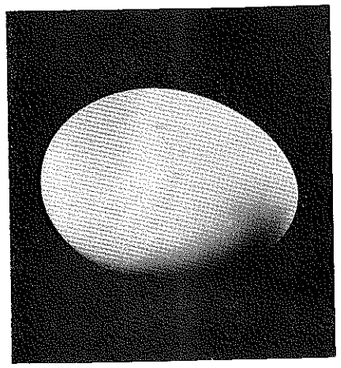
A NUMBER of teachers of agriculture have requested me to write an article on how to make good pictures. This is quite an order. However, any teacher can make a good picture if he will observe a few general principles and have the patience and eagerness to do it. This article will deal with only a few basic suggestions on how to arrange and get the picture rather than with a lot of details about operating the camera, selecting different type films and dozens of other things, which if well treated would fill a book.

A booklet on how to operate the camera is furnished you when you purchase the camera. Follow the instructions given in this booklet. Aids for the amateur or professional photographer are available at every photographic supply counter on how to make good pictures. Secure copies and study them with the determination to learn.

Now, let me give you a few suggestions based on my experience in making pictures. Two of these suggestions are basic to all pictures. The others are accompanied by illustrations.

Plan Your Picture for a Specific Purpose

You must have some purpose in mind or you would not be making the picture. If your picture is to show an improved farming practice be sure you have all the important elements of the practice in the picture correctly arranged to show it. Move up as close as possible with the camera to show all details. If your picture is to show action, be sure the action is natural and normal for the practice and situation. If you are making a picture of a still subject, a landscape, a person or persons, or just a record snap shot, feature the things most important.



Picture No. 1

Use Only One Kind of Film for Your First Year as an Amateur

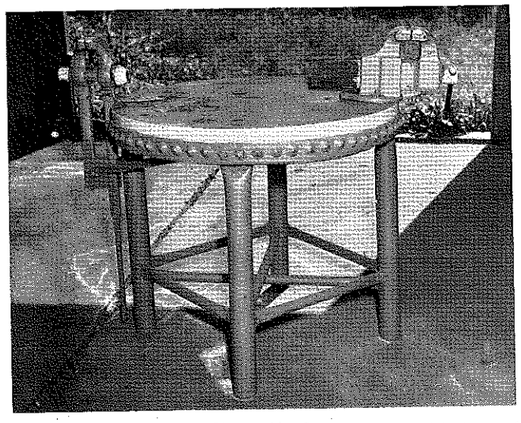
The less you have to learn the better you can learn it. At least, this is a safe statement for the beginning photographer. The Super XX film, or its equivalent in type and speed, is a good all-purpose film. With this film, the K-2 filter, and a medium priced camera you can learn to make good pictures *if you want to.*

Take Everything out of the Picture That Does Not Contribute to it. Picture 1.

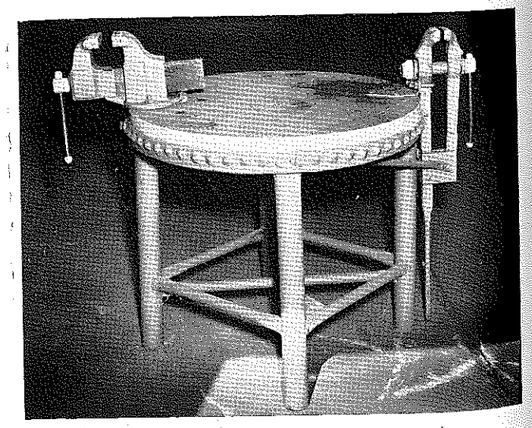
This is a trite statement of a most important step. The picture of the egg illustrates the result of following this procedure. My purpose in making this picture was to show what an egg is like and nothing else except to provide a faint suggestion of its resting place. You will need to study methods of lighting, selection of appropriate backgrounds and exposure charts before success with objects like this. You can improve on this one.

Take Advantage of Existing Back Grounds when Planning your Pictures. Pictures 2 and 3

The pictures of the stand for the machinist and leg vises illustrate what happens when you fail to utilize the best existing background (see picture at left), and what happens when you make best use of the background available (see picture to the right). This vise stand was stationed near the wide open door of the shop. The first shot was made looking out of the shop door using the shrubs outdoors as a background. The shrubs clutter up the picture and are in no way related or contribute to it. The second picture was made from the opposite side without moving the vise stand. In this case, the dark and distant walls of the shop faded out of this shot and left an almost solid black background. The walls of the shop were too far from the flash-bulb to be lighted up enough for film exposure. The result is a clear cut picture showing details of the vises and stand.

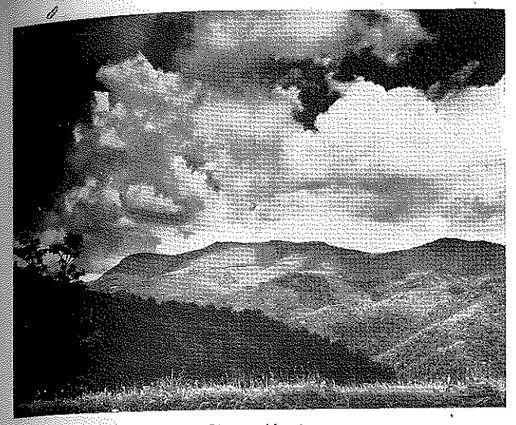


Picture No. 2



Picture No. 3

(All pictures by J. K. Coggin)



Picture No. 6

Picture No. 7

Had the walls or any other background been close-up, they would have formed part of the picture.

If the Subject to be Photographed Does Not Have an Appropriate Back Ground, Provide One when Possible. Picture 4.

The background for the portable electric drill on stand was provided by hanging a large sheet of white paper at least four feet back of it. The greater the distance of backgrounds from the subject, the better in order to simplify the problem of eliminating the shadows. If shadows are desired, adjust the background closer to the subject.

A Picture Should Tell its Own Story and to do so It Must be Complete. Picture 5

The baby and its mother were not available when the picture was first planned. They were sent for and included to make the story complete. The picture itself may not be too good but it does tell the story.

Plan in detail what you want in the picture and work to get it. Most pictures are created in the mind. They are not accidents. The camera is only a tool to record the picture you have planned for and arranged, first in your mind and second in reality. It takes planning, patience, time and often a lot of work to plan a picture that will tell the story you are working for.

Put "Life" in Your Outdoor Pictures. Pictures 6 and 7

Capture the clouds and all elements seen by the natural eye. All the amateur needs for this is a medium yellow (K-2) filter with adapter ring and shade, available at all photo supply counters. The sky in the above pictures would have been cloudless had the filter not been used. The medium yellow filter is all you need for general outdoor shots—no need to buy a trailer load of gadgets to get good pictures.

You use twice as much exposure when using the medium yellow filter. For example: If you are using Super XX film, or its equivalent in speed, and ordinarily expose with camera settings of F16 at 100 second in bright daylight, stop down to F11 at 100 second when using the filter. Make other exposure adjustments accordingly.

Note the foregrounds in these pictures. See suggestion no. 12 and discussion of foregrounds.

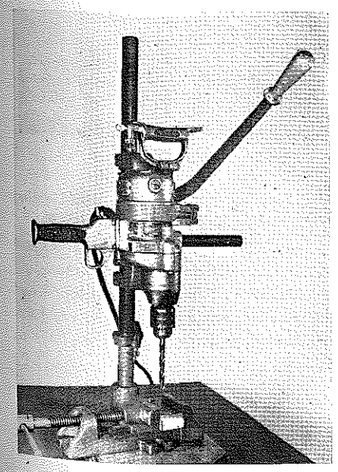
Utilize Diagonal Lines, "Angles," to Draw the Eye to the Center of Interest in the Picture. Picture 8.

Again, you must plan carefully to get best results. The lines or angles may or may not be distinct in the picture. The picture (No. 8) "pulls" your eye to what is being done by utilizing very distinct and harsh lines. (See picture no. 14 for less distinct angles and lines). Criticisms: The picture is "incomplete" in that the worker is not properly dressed for his job. He should have on work clothes as commonly worn by the electrician.

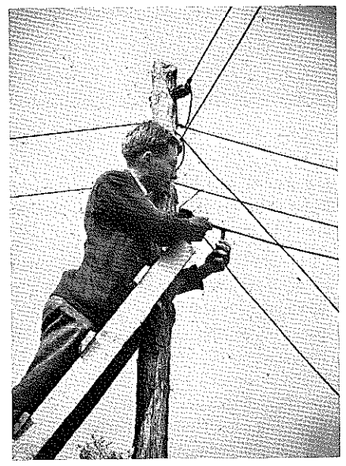
Provide for "Contrast" in all Black and White Pictures. Picture 9

This calf would have been "lost" without the dark background. Try photo-

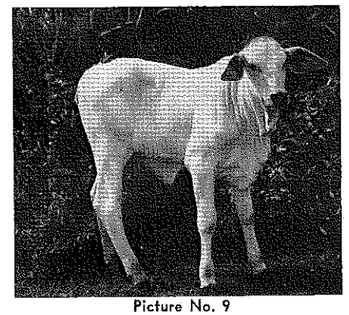
(Continued on page 8)



Picture No. 4

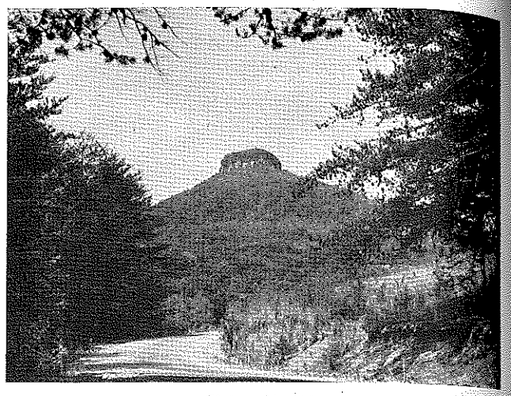


Picture No. 8



Picture No. 9

Picture No. 10



Picture No. 14

graphing a bald-headed man in front of a white background and you will "lose" the top of his head. Generally, utilize dark backgrounds for light subjects and light backgrounds for dark subjects. In group pictures of people or multiple objects that range from dark to light, place darkest objects close to camera, particularly if picture is artificially lighted with flash bulbs.

In Farm Scenes and Subjects Containing Multiple Objects, Position your Camera at a Point Where all Objects may be Seen. Picture 10

This picture of a field of stacked peanuts was taken from the top of a building in order to separate the stacks. Note the diagonal lines and shadows.

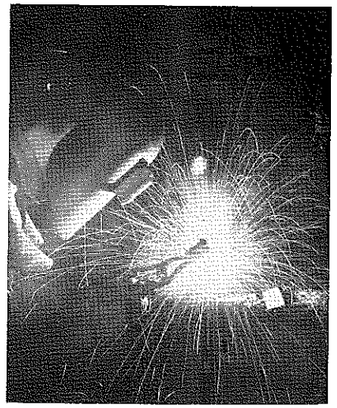
The stacks and other interesting details in the landscape would not have shown in the picture had the camera been snapped just above ground level. Try to utilize diagonal or side lighting, especially with round objects.

A Close-up of a Little is Often Better than the Whole Thing. Picture 11

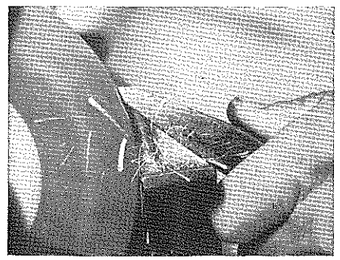
The purpose for its use will again be a factor in deciding on how much to include in the picture. Detail cannot be shown with distant shots. The medium yellow filter was used here to bring out the clouds and provide a light background.

The sky with or without clouds often provides the best possible background for close-up field shots.

Picture No. 11



Picture No. 12



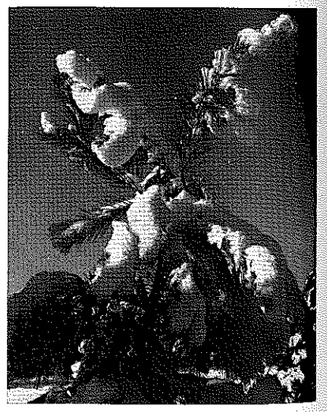
Picture No. 13

If Action is Part of the Job, be Sure to Capture the Action in Your Picture. Pictures 12 and 13

The above pictures were shot with the K-2 yellow filter to bring out the sparks. In the welding picture, the electric arc was the only source of light. The picture of the grinding rock and chisel was lighted with photoflood. Is the picture "complete"? We don't know about the goggles. Perhaps a glove should have been worn to meet highest safety standards.

Provide a Foreground for Landscape Pictures and Pictures that Include Distant Objects. Picture 14

The picture of Pilot Mountain, North Carolina, was made two miles from the pilot knob at the top of the mountain. By "framing" the knob with a foreground of tree branches and by including the road, "distance" was recorded in the picture. The road and tree branch lines draw the eye to the center of interest as illustrated in picture no. 8. It just would not get partly cloudy the day this picture was made. The K-2 filter picked up all the available hazy clouds.



Picture No. 15

Use Side or Better Almost Back-Lighting when Making Snow Scenes. Picture 15

The back lighting provides texture which can only be captured by recording the shadows of the snow particles. When snow scenes are shot with the sun back of the camera there are no shadows to record. Use K-2 filter. □

Men are never so likely to settle a question rightly as when they discuss it freely. —Thomas Macaulay

Some guides in

Starting a new Vo-Ag department

which have proved useful in Mississippi

Troy V. Majure, District Supervisor, Utica, Mississippi

Troy V. Majure

THERE are many problems to be dealt with in starting a new department. When a school begins to investigate the requirements for establishing a new department, the local school officials should contact the State Director of Vocational Education or members of the supervisory staff for vocational agriculture. Of course, the first questions asked by the local officials are what are the requirements that have to be met by the local school and when can we expect to begin our program. Much pick and shovel work is necessary before the local school is approved. The proper procedure for establishing a vocational agricurture department in a school requesting aid is for a member of the state supervisory staff to thoroughly indoctrinate the local officials as to the purposes and philosophy of vocational education in agriculture. Also, explain in detail the policies of the State Vocational Board governing the establishment of a vocational agriculture department in a high school. Before the State Vocational Board can approve a school for a vocational agriculture department, there must be sufficient funds available on the state level for reimbursement on the teacher's salary.

The basis for establishing vocational agriculture in any high school in Mississippi is that it shall be a four year accredited school and provisions shall be made for:

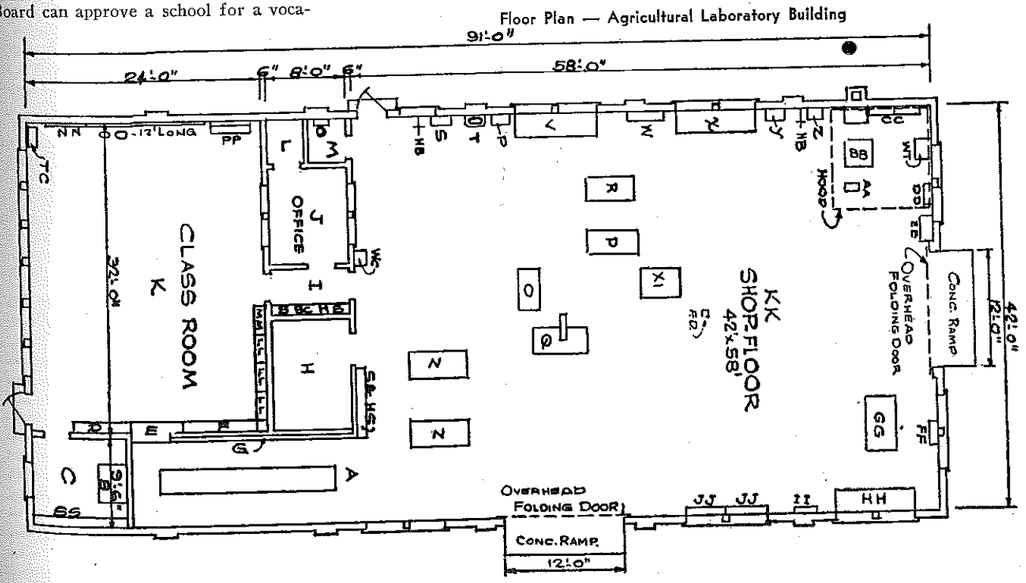
1. Service area of the school to consist of not less than 75 square miles of territory.
2. Enrollment of not less than 100 high school students in the upper four grades.
3. Facilities consisting of a classroom and farm shop constructed according to plans and specifications furnished by the Division of School Building Service of the Department of Education.
4. Library, laboratory and shop equipment (recommended by the District Supervisor) sufficient to give satisfactory instruction in farm mechanics, in order to meet the needs of the individual in his particular area.
5. A comfortable teacher's home that will be in keeping with good living stand-

(Continued on page 17)

LEGEND

A—Lumber Room and Rack
B—Chart Rack
C—Store Room
D—Book Case
E—Visual Aids
F—Mimeograph File Cabinet
G—Racks for Bolts and Nuts
H—Tool Room
I—Hall
J—Office
K—Class Room
L—Store Room
M—Toilet
N—Wood Work Bench
O—Band Saw
P—Planer
Q—Radial Arm Saw
R—Jointer
S—Medicine Cabinet
T—Wash Basin
U—Towel Rack
V—Sheet Metal Bench
W—Sheet and Cold Metal Cabinet
X—Cold Metal Bench
Y—Drill Press
Z—Tool Grinder
AA—Anvil
BB—Forge
CC—Forge Cabinet
DD—Electric Welding Cabinet
EE—Electric Welder
FF—Leather Work Cabinet
GG—Leather Work Bench
HH—Tool Fitting Bench
II—Tool Fitting Cabinet
JJ—Saw Filing Rack
KK—Shop
LL—Bulletin Rack
MM—Boys Book Shelf
NN—Bulletin Board
OO—Chalk Board
PP—Magazine Rack
XI—Table Saw
TC—Teachers Case
S&C
HS—Shelf & Hook Strip
SS—Book Shelves
WT—Welding Table—18" x 24"
HB—Hose Bibb
FD—Floor Drain
WC—Water Cooler

Floor Plan — Agricultural Laboratory Building



The place of - - -

(Continued from page 4)

for the benefit of the school and the community.

However, as teachers, you should not forget that fundamentally, the Future Farmers of America were organized as a device for teaching. Through the Future Farmers of America, you have the opportunity of teaching rural leadership, cooperation, group action, public speaking, thrift, parliamentary procedure, social service, and above all, citizenship. In your regular class work, laboratory work, and on the farm, you have the opportunity to teach the boy the principles of farming, the skills needed in farming, and how to earn a living as a farmer. Through the FFA, you have the opportunity of teaching him to live on a farm as an individual who is willing to accept the responsibilities of rural citizenship. You can help him fulfill the ambition which he expressed as a freshman when he recited the FFA Creed, ending with these words: "I believe that rural America can and will hold true to the best traditions in our national life, and that I can exert an influence in my home and community which will stand solid for my part in that inspiring task."

Out-of-School Young Farmers

We should keep in mind that vocational agriculture is intended for the youth and adults out of high school as well as high school students. Too many of our public schools are confining their educational efforts to the high school students when in reality, the out-of-school youth have a greater need for vocational training. Nearly every community has from 25 to 100 young men who have finished high school or dropped out of school and are now trying to get established in farming. Here is one of the most fertile fields for vocational agriculture. These farm youth have made their decisions, and they intend to become farmers. They need all the help you can give them in meeting the problems which they will encounter as they become established in farming.

Adult Farmers

I can remember the time when farmers ridiculed the "learning" which some men obtained at a State College of Agriculture. Very few farmers were willing to attend an extension meeting or enroll in a short course offered by the agriculture instructor in the local high school. That is not the situation today. For example, in my State, approximately 15,000 adult farmers are enrolled this year in adult farmer courses offered by more than 400 high schools. I imagine that a similar situation exists in your own States. I have not included in the above figures approximately 10,000 veterans who are enrolled in Institutional On-Farm Training. Surely this is a clear indication that adult farmers will attend special courses organized for them if the courses will (1) give them information which they can use in their farming operations, (2) be offered at a time which will permit their attendance. This adult farmer group is the third and the largest group in the community which should be served by the agricultural department of the secondary school.

Conclusions

I realize that I have outlined a big and difficult job for the teacher of vocational agriculture who intends to offer a complete program of agricultural education in his community. Certainly, a program of agricultural education in any community cannot be complete unless it includes organized instruction in agriculture for (1) farm boys who are in high school, (2) farm boys who are out of school, and (3) adult farmers. This complete job of agricultural education in a community can be done. Some of you are doing it now. Boards of education and school adminstrators are beginning to see the vision of a complete program of agricultural education in their communities. With their cooperation and assistance, the "master" teacher of vocational agriculture will not be satisfied until he is able to offer organized instruction in agriculture to all the farm people of his community.

School administrators and school boards must recognize the importance of the students' farm practice program and the advantages of teaching on the farm if they are to have a good vocational agriculture department. Wherever you find a vocational agriculture department with good farm practice programs being conducted by the students, *there* you will find a functional program of vocational education in agriculture. □

Theme for August . . .

"School and Community Services"

Who writes what you read?

A TOTAL of two hundred and sixty-seven articles have appeared in Volume 25 of the Magazine. This is exclusive of a few items in the nature of announcements and copy supplied by your Editor. It does not include contribution of pictures used separately from articles such as on the cover page and in the Pictures of the Month page.

Teachers have contributed over half of the articles. Outside of our own group of workers in vocational agriculture there have been 42 contributions or almost sixteen per cent of the total.

The North Central Region has been represented most frequently in Volume 25. Only six States and Territories have failed to furnish one or more articles. Seven other States and Territories have one contribution each to their credit. Pennsylvania and Ohio lead in the frequency of contributions. The following data reveal additional analysis of the location of the contributors to Volume 25, listed in the Index found elsewhere in this issue.

Source of Contributions

	Items	*Percentage*
Teachers	150	56.2
Supervisors	19	7.1
Teacher Trainers	56	21.0
Others	42	15.7

Contributions by Regions and States

North Atlantic Region—73

Connecticut	4	Massachusetts	4	Pennsylvania	18
Delaware	1	New Hampshire	4	Rhode Island	0
Maine	2	New Jersey	2	Vermont	11
Maryland	4	New York	17	West Virginia	6

Pacific Region—34

Arizona	1	Idaho	0	Oregon	2
California	7	Montana	4	Utah	6
Colorado	3	Nevada	2	Washington	6
Hawaii	1	New Mexico	1	Wyoming	1

North Central Region—106

Illinois	16	Michigan	11	North Dakota	2
Indiana	4	Minnesota	10	Ohio	18
Iowa	9	Missouri	8	South Dakota	1
Kansas	0	Nebraska	11	Wisconsin	16
Kentucky	0				

Southern Region—50

Alabama	1	Mississippi	6	Tennessee	4
Arkansas	4	North Carolina	7	Texas	7
Florida	7	Oklahoma	2	Virginia	6
Georgia	3	Puerto Rico	0	Not Classified—4	
Louisiana	3	South Carolina	0		

The Agricultural Education Magazine

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PERSONAL

BOOK REVIEWS

(Reviewed by A. P. Davidson)

Agricultural Education Magazine

Index to Authors, Volume XXV

July, 1952 - June, 1953

To meet changing conditions . . .

Let's bring Vo Ag up-to-date

Some of the directions in which to progress

Elwood M. Juergenson, Teacher Education, Univ. of Calif., Davis

E. M. Juergenson

ACCORDING to a recent issue of a current magazine listing curious laws in various states, in Ohio it is against the law to shave on Sunday, in Oklahoma it is illegal for any person to carry a spear in public places, and in Danbury, Connecticut, no one can fly a kite on the streets without a permit from the Mayor.

Ridiculous as these laws may seem to us now, there was a time when they seemed logical and served a need. They were not meant to be humorous. Their originators were sane, serious folks and legislated such laws as they felt would solve the problems at hand.

In like fashion, it is entirely conceivable that we in vocational agriculture can be operating to some extent under a parallel situation. When the Smith-Hughes law was passed in 1917 it was done so with the idea of solving a problem as it existed at that time. Originally it was in part at least a pump priming legislative move and designed only to initiate action until individual states could totally finance themselves in vocational education. Certainly the objectives as set up have been realized to a large extent. Vocational agriculture has used as its objectives the governing principles outlined by the founders in the Smith-Hughes Act almost four decades ago. Additional money has been appropriated, new services have been added, but the conditions set forth as to how vocational agriculture must be carried on have changed very little. This is not surprising as these principles are sound and for the most part good education. On the other hand, the fundamental conditions under which federal funds would be granted were directed toward a certain group of individuals who at that time needed aid most. As outlined, state funds would be matched if those individuals to benefit from instruction were:

1. to be fit for useful employment.
2. to receive education of less than college grade.
3. over 14 years of age.
4. preparing to enter upon the work of a farm or farm home.

Let us review briefly and see what the conditions of our country were that set the stage and developed the attitudes in which the Smith-Hughes Act was conceived.

Conditions Were Different

Agriculture production was low. It took approximately five people working on the farm to support one person in the city. Free land in the ordinary sense was not available, yet anyone willing to work hard could become actively engaged in *production agriculture,* as the trend was for large tracts of land and large farms to be broken into smaller farms. Surpluses were not evident and greater production was the prime need. The machine age, as far as farming was concerned, was still a long way off. Few farm boys went to college, in fact, comparing secondary school enrollment figures with elementary enrollment figures, only 10% of those enrolled in elementary schools finished high school or were even enrolled. College was just a dream for the majority of boys and girls and, for the most part, still reserved for a handful of those financially able to attend. Farm life was difficult and required long hours of labor. Because of these conditions it was apparent what segment of our people were most in need of help. It was felt that by helping this group, the total population would eventually benefit.

In view of these conditions, it is not surprising that the basic framework of the Act was to limit training to those boys who were in or about to enter farming, for at that time they comprised a very large part of rural youth. They were also the group that needed help most. It is interesting to speculate as to what limits an act would encompass should it have been enacted in recent years having as its basic idea that of furthering the progress and opportunities of rural people.

The major objectives might be the same but it is doubtful if the range would have been as narrowly defined, as agriculture is operating on an entirely different plane.

Changes in Agriculture

Today 15% of the population working on farms support the remainder of the people in the nation. Farms are getting fewer and larger. This trend may reverse itself eventually, but at least it is the current situation and could continue so for a long time. Farms are highly mechanized. Farmers need not work as hard nor as long as formerly in order to produce more. The difference between profit and loss on our present-day mechanized farms is usually dependent upon how efficient the operator is in managing machinery and equipment. This is due, in a large part, to the high cost of labor. Agricultural labor is becoming highly skilled and the need for just strong hands and strong backs is fading out of the picture. Skilled farm labor is in demand and very rewarding financially to those so inclined.

Changes in Education

Education, in general, is compulsory though the amount of schooling may vary in different states. Nearly all of the youngsters of elementary school age attend classes below high school level. Comparing even 1920 figures to those of 1945, over double the number are attending secondary schools in 1945 compared to 1920, and this upward trend is increasing. This increase would not be so significant if ratios of farm boys to all boys remained the same. While more boys are going to school, *less* are coming from farms. Therefore, less are going into production farming. This, in itself, presents a problem and a challenge to vocational agriculture. High school administrators, while thoroughly sold on vocational agriculture, are worried when each year brings more and more boys and girls to school accompanied by dwindling classes in vocational agriculture. He watches the breach between teacher-pupil ratio in vocational agriculture versus all teachers becoming wider and wider. Some administrators are having difficulty justifying to the school board and community the high cost of maintaining an agriculture department for the small number of boys who are qualified vocational agriculture students, while other classes, especially academic classes, are getting larger every year. Many administrators are irritated by the situation, even though they admit that the Future Farmers of America is a fine program. Agricultural teachers themselves, in many instances, are swamped with a host of duties including the almost impossible situation of trying to get acceptable productive projects for borderline cases in an effort to build up or maintain a respectable enrollment in their agriculture classes, or to accept students into their program who have no chance to enter farming yet are highly interested in agriculture. In some strictly rural communities, the situation has remained unchanged and may continue to be so for some time to come. In many others, additional factors have greatly influenced the interests and background of this enlarging student enrollment. Decentralization of industry has in some cases almost over night changed the atmosphere of a school into that of something other than a rural school. Where farm boys have made up 40 to 60 per cent of the boys in the school, industry moving into an area can quickly lower that to the point to where the bona fide farm lads make up only a handful of the boys in school. Even if these new pupils entering school are interested in agriculture, and many of them are, they do not meet the qualifications set up in the wording of the present vocational acts.

Rural Living Has Changed

Along with the change in school population there is, as most folks know, a change in their parents. Rural life can

be fun. Electricity, radio, television, good highways, and modern automobiles have made country life a pleasure. Not everyone can earn a living in agriculture, but many can live in the country. As a result the number of part-time farmers living on small farms but working in the city, has reached a sizeable figure and is constantly increasing.

What should be done to meet this challenge and bring about a better relationship between vocational agriculture education and general education, and yet meet the need of all agriculture in a community?

The rift between vocational agriculture as taught and practiced by 1917 standards and the current needs of all agriculture, is present and widening. This need not be so, as many teachers of vocational agriculture are satisfactorily meeting the needs of their community now, even though certain parts of their program might be scrutinized with tongue in check.

Training for Farm Labor

Vocational agriculture must continue to provide the excellent training for boys from farms who are about to enter the field of farming. What about the farm labor hired by that future farmer or other farmers? Well trained, capable, farm labor is not in surplus. As previously pointed out, today's farm labor must be skilled in the use of intricate farm machinery, trained in the use and practice of proper safety measures, able to make intelligent decisions regarding repairs and similar matters as well as the ability and willingness to take a certain amount of responsibility. A well-planned course in vocational agriculture can produce such individuals and thereby satisfy a need of agriculture and place many boys into agriculture who rightfully belong there but stand little or no chance of ever becoming successfully established as owner-operators.

Training to Service Agriculture

As farms became mechanized and agricultural know-how increased, more and more people were needed to service and supply the special needs of farmers. Industry is closely related to agriculture, both from the standpoint of supplying the equipment and materials needed for farm production, and, also, in handling the products after they leave the farm. Many of these operations formerly done by farmers themselves are now performed by an allied industry. Implement dealers, insecticide and fertilizer companies, feed dealers, food and fiber processors, cooperatives and other marketing agencies, transportation and storage of farm products are but a few of the host of industries paralleling and closely allied with farming. All of these concerns need people; not on the executive level necessarily, but persons who understand and are trained in dealing with the problems of farmers. These people for the most part will *not* be college trained. Where in the high school curriculum does any program approach the training needed by these folks except through a well-organized program of vocational agriculture with the objective of employment in an allied industry of agriculture in mind. This program, obviously, must be different than one for the boy who plans to one day take over his father's farm.

Needs in Part-Time Farming

With the dwindling agricultural population, it is becoming increasingly apparent that agriculture needs friends and sympathy in the city. The vote-getting power of the farmer can stand some bolstering. Vocational agriculture has a made-to-order opportunity in the growing number of part-time farmers—people who work in the cities but have their hearts and homes in the country. Adult and evening classes have made a start in this direction. More can be accomplished with these adult classes, but it is the responsibility of vocational agriculture to enlarge its offerings, change them if necessary, but provide training for students who have as their agricultural objective only that of part-time farming.

One of the most beckoning areas to students today is that offered by the field of service to agriculture for those who are college trained. Teaching, extension work, foreign service and industry are dependent upon and need college trained people in agriculture. Why should vocational agriculture not have as one of its objectives, that of interesting and preparing a student to go to an agricultural college? Those students with some degree of aptitude and interest in agriculture, yet no chance of entering production agriculture, can profit immensely from the high school vocational agriculture course with entrance to an agricultural college as their primary objective.

A Shift in Emphasis

As the field of agriculture is constantly changing and advancing, so must the emphasis in agricultural education shift to meet these new demands. We teach and believe that every curriculum within a school should be based upon the needs of that particular community and society as a whole. If this be true in a local sense, why not so with our goals and objectives for agriculture as a whole in our country. Agriculture still needs to train farm boys who are preparing to enter farming or take over a farm through inheritance. It also must provide training for the host of skilled workers needed to service agriculture through allied industry. Farm labor needs help in providing safe, dependable, efficient operators for the machines that today do most of yesterday's drudgery. Part-time farmers can be the friend and ally of agriculture if their place in rural life is recognized and they are given training to prepare them to fit into their dual employment. Finally, agriculture needs agriculturalists who are highly trained specialists.

Nowhere in our secondary school system, except vocational agriculture, is there any real semblance of training available to this mass of non-farm students who will be associated with farming but not directly engaged in it. Vocational agriculture has the choice of maintaining its relatively narrow field or broadening its concept to meet the challenge and demands of our changing rural economy. □

Starting a new - - -

(Continued from page 9)

ards for the agriculture teacher, rent free.

Community service equipment such as the following may be desirable in order to meet existing local needs:

1. Canning equipment for training farm families in food conservation.
2. Soil testing equipment.
3. Terracing and conservation equipment.
4. Necessary tools and equipment for teaching production skills in livestock, forestry and horticulture.

The school should set up a budget for maintenance, repair and replacement of equipment and instructional supplies in sufficient amount to maintain adequate teaching facilities in first class condition to provide the instruction that is needed.

When the local school officials meet the above requirements, or agree to meet them during the current year, the vocational department can be approved by the State Vocational Board.

Other requirements are that a teacher of vocational agriculture must hold a B.S. degree in Agricultural Education from an approved Teacher Training Institution. He must be employed by the local Board of Trustees for a 12-month period and devote 100 per cent of his time to teaching vocational agriculture. He must keep his license renewed by improving himself professionally according to a plan adopted by the State Board for Vocational Education.

The success of any department toward accomplishing the purposes of vocational agricultural education depends to a large extent upon the vision and ability of the teacher to plan and carry out a well-rounded program in the school and community. Therefore, in starting a new department the school officials should work very closely with the supervisor in selecting a teacher.

Shown on page 9 is a floor plan for agricultural laboratory building adopted by the State Vocational Board of Mississippi in 1948. All vocational agriculture departments established since then have been built according to this plan. To establish vocational agriculture in a school and provide the necessary facilities including equipment and teacher's home will cost approximately $50,000 at the present time. □

Our community - - -

(Continued from page 5)

and cooperation of those many persons who would not be dismayed by failure of a bond issue and were not afraid to pioneer. They knew what they wanted, they knew there would be hours of criticism also, but their work will be an inspiration to other local groups interested in vocational Ag to do likewise.

Since the completion of this building, there have been four built in Colorado under this plan, and plans are taking shape for two more in our county to be completed by fall. □

How well do we agree in our

Supervised farming terminology

A point of view offered by

F. E. Armstrong, Teacher Education, University of Hawaii,

THE SMITH-HUGHES ACT requires that each student enrolled in vocational agriculture complete at least six months of directed or supervised practice in agriculture each year. In the thirty-five years that this requirement has operated many special terms have come into use to describe phases of the program, each carrying its own particular shade of meaning. Some teachers of vocational agriculture may not be familiar with all of these, or they may be confused as to the specific meaning of others in common use. This is written in the hope that it may help to clarify the situation.

F. E. Armstrong

"- - - THAT SUCH SCHOOLS SHALL PROVIDE FOR DIRECTED OR SUPERVISED PRACTICE IN AGRICULTURE, EITHER ON A FARM PROVIDED FOR BY THE SCHOOL OR OTHER FARM FOR AT LEAST SIX MONTHS PER YEAR - - -" This is the exact wording of the Smith-Hughes Act. It has been held by the Office of Education, Federal Security Agency, to require each student in vocational agriculture to do at least six months of directed or supervised practice each year he is enrolled. The requirement applies to all students enrolled in all-day, day-unit, young farmer, and adult farmer classes. No exceptions are permitted. It is assumed that all-day and day-unit students will develop individual farming programs, young farmers will develop farming activities that will lead to their establishment in farming, and that adult farmers will be encouraged to adopt new or improved agricultural practices.

The "such schools" referred to in the quotation above are those in which is employed a teacher of vocational agriculture, a portion of whose salary or travel allowance is reimbursed from federal funds or is used to match federal vocational education funds.

Distinctions Not Clear

The distinction between "directed" and "supervised" practice in agriculture has never been drawn too closely. If there must be some distinction, probably "directed" practice should be those activities over which the teacher of vocational agriculture exercises rather complete control. "Supervised" practice would be those activities over which the student has control, but which are carried out of the work on our school farms probably should be classed as "directed" practice, while that carried out as individual, group, or class projects should be considered as "supervised" practice.

Since many projects carried by students in vocational agriculture run for one production cycle, it is sometimes difficult to meet the requirement of "at least six months per year" when the student's supervised farming program consists of a single project. This difficulty should not arise if the student carries an extensive program, or if it is understood that the project begins when the student starts making plans for it, and closes when he files his report with his instructor.

Supervised Farm Practice

When courses were first offered in vocational agriculture, it was generally understood that the requirement of "at least six months of directed or supervised practice per year" offered excellent training opportunities, but too frequently the student met this mandatory provision of the act by carrying a single home project for a period of six months. Gradually it was recognized that the boy needed assistance in developing his own farming program, and the term "supervised farm practice" came into use. It really means that the boy practices farming under the supervision of the teacher of vocational agriculture. Within recent years, however, "supervised farm practice" has been replaced by another term, "supervised farming."

Supervised Farming

Literally, "supervised farming" means that the student farms under the supervision of the teacher of vocational agriculture, not that he simply "practices" farming. The complete supervised farming program carried by an all-day student should be sufficiently comprehensive so that it leads to a start in farming by the time the student graduates from high school. To do so it must furnish the experiences needed to develop skills in real farming situations at a level appropriate to the student's age and physical ability. It should include several distinct kinds of farming activity. The supervised farming program must be regarded as an integral part of vocational agriculture, not something tacked on to satisfy the requirements of the Vocational Education Act.

Young farmers and adult farmers are also required to include a comprehensive program of supervised farming as a part of the instruction they receive. With these students "supervised farming" provides additional opportunities for continued growth and eventual satisfactory establishment in farming.

Meaning of "Project"

For years the agricultural experiment stations in the states and territories have used the term "project" to designate carefully planned investigations in agricultural science that require a long period of time for their completion. The co-operative agricultural extension services use the term to designate an important program that requires a considerable time to complete, and from which valuable and concrete results are expected. Long before the passage of the Smith-Lever Act or of the Smith-Hughes Act teachers of agriculture in secondary schools throughout the nation used the term "project" to describe the practical activities carried on by their students on home or school farms to provide skills and managerial experience needed to supplement classroom instruction. Usually in the early days a single "project" was carried each year the student was enrolled in vocational agriculture, and each year the "project" was different from those completed in other years. Today, however, we think of the project as only one of several units in the supervised farming program. We feel, too, that the project should be continued and expanded from year to year. A single project carried to satisfy the provisions of the federal Vocational Education Act will never result in the student making a satisfactory beginning in farming or in his becoming established in farming. A broad program of supervised farming should include production projects or placement for farm experience, reinforced by improvement projects and supplementary farm practices.

Production Project

This type of experience is sometimes referred to as a "Productive Enterprise Project," or as a "Productive Project." It constitutes a business venture for profit by the student in which he carries out all of the jobs commonly performed in his community in producing and marketing an agricultural commodity, such as chickens, eggs, vegetables, sugar cane, pork, and the like. One of the principal reasons for carrying this type of project is the income produced. The student needs to accumulate capital, supplies, equipment, livestock, and land if he is to be a successful farmer, and production projects offer him the opportunity to earn the money he will need to obtain them. Production projects constitute a fundamental part of the instructional program in vocational agriculture. They are usually carried out at the student's home or on some other farm, but could be completed at the school farm as group or individual projects. They involve a great deal of study and planning by the student, careful attention to details in executing the plan, accurate recording of all activities connected with the project, a systematic evaluation of results, and a detailed summary made in the form of a report to the instructor. Student ownership and managerial responsibility are both highly desirable, conditions sometimes met through a partnership arrangement with the boy's father or some other responsible person. Another feature of this type of activity is the close and continuous supervision provided by the teacher of vocational agriculture.

Production projects seem to be better adapted for use with all-day students. They ordinarily constitute a large part of the supervised farming activities completed by most all-day students, but are seldom carried by students in young farmer classes, and almost never by adult farmer students. The following illustrations show the kind of production projects that might be carried by all-day students. There are many others available.

1. All of the activities involved in the study, planning, recording, summarizing, evaluating, and reporting the work done in producing truck crops from a half acre of ground.

2. All of the activities involved in the study, planning, recording, summarizing, evaluating, and reporting the work done in producing chicken eggs for home consumption and for market from a flock of 50 or more hens.

3. All of the activities involved in the study, planning, recording, summarizing, evaluating, and reporting the work done in producing and marketing coffee from two acres of ground.

4. All of the activities involved in the study, planning, recording, summarizing, evaluating, and reporting the work done in producing pork when the student starts by selecting a breed of swine and ends with marketing the pork from one or more litters of pigs.

Improvement Project

An improvement project consists of a series of related jobs which, when properly carried out, improve the real estate value of the farm, the appearance of the farm home, the efficiency of a farm enterprise or of the farm business as a whole, or that contribute to the comfort and convenience of the farm family. Usually the student has no ownership in improvement projects, nor do they bring him direct financial income, but they do furnish excellent learning opportunities. In order to be of maximum educational value, improvement projects should be planned and carried out by the student with general direction being furnished by the teacher of vocational agriculture and with the full cooperation of his parents.

Each student in vocational agriculture should be encouraged to complete one or more improvement projects each year he is enrolled, but they should be in addition to production projects or placement for farm experience. Examples of improvement projects that could be conducted are given below.

1. Increasing the real estate value of the home farm by establishing a soil conservation program in which several of the following jobs are completed: Making a map of the home farm showing eroded areas; reclaiming badly eroded areas by controlling and eliminating gullies; surveying and building terraces; planning a land-use program for the entire farm; planning and carrying out a water conservation program.

2. Increasing the real estate value of the farm by constructing, remodeling, or reconditioning one or more farm buildings.

3. Increasing the income from the farm by keeping and using complete cost accounts for the entire farm. The student would prepare opening and closing inventories, record all receipts and expenses, summarize the accounts, analyze and interpret the records, and suggest ways of improving the farm business.

4. Increasing the income from a single enterprise, e.g., the poultry enterprise, by carrying out several of the following jobs: Keeping egg production records on individual birds, interpreting the records and making needed changes in managing the flock; planning for and carrying out a system of culling; planning and carrying out an improved feeding program; planning for and improving the housing of the birds in the flock; identifying and controlling poultry pests; planning and maintaining better sanitary conditions; obtaining better breeding stock.

5. Improving the conditions under which the family lives by beautifying the farm grounds, or by carrying out several of the following jobs: Repairing the farm home; painting the home and other farm buildings; properly screening windows; replacing broken or cracked window panes; remodeling the kitchen to provide for greater efficiency and convenience; constructing window boxes and growing flowers in them.

Supplementary Farm Practice

This phase of a student's supervised farming program is sometimes called "supplementary farm jobs." It is frequently confused with "supplementary project." Supplementary farm practice refers to individual jobs undertaken by the student in enterprises that lie outside of those included in his production or improvement projects. The jobs are undertaken to provide additional experience and skills, or to improve his efficiency in farming. They "supplement," or are in addition to, the experiences he gains from other parts of his supervised farming program. In a production project the student is expected to complete all of the jobs in the production cycle of the enterprise. In an improvement project he completes several related jobs in the enterprise, but supplementary farm practice consists of one or two unrelated jobs in an enterprise, although jobs in several enterprises may be included. Student ownership is usually lacking in supplementary farm practice, as also is student income. Student planning and responsibility are much more pronounced in improvement and production projects, although there should be some of each. Supplementary farm practices can usually be completed in a relatively short period of time, but they must be related to classroom instruction, and should be reported to the teacher of vocational agriculture when finished. The teacher should keep a record of those completed by each student, and these should be reported to the State Supervisor of Agricultural Education with other forms of supervised farming.

Most of the jobs carried out on school farms should be regarded as supplementary farm practices provided they are not in an enterprise in which the student is carrying a production or an improvement project. The following examples will serve as illustrations of the kind of activity that might be classed as supplementary farm practice.

When the student is carrying a poultry production project and an improvement project through which he attempts to beautify his home grounds, learning to do one or more of the following would be classed as supplementary farm practice: Treat the swine herd to control lice; install guard rails in the farrowing pen; assist at the time the sow farrows; dehorn calves with chemicals; control insects attacking vegetables; grade and market vegetables; lay out a papaya orchard and plant the young trees; prune citrous trees growing in the home orchard; eradicate weeds by using chemicals; test soils on the home farm for nitrates, phosphates, potash and suggest a program of fertilization; recondition and sharpen farm tools; prepare income tax returns; hire emergency labor needed on the farm. Many other jobs which this student could learn to do would be classified as supplementary farm practice, but the important thing the instructor must remember is that they could not have to do with poultry production or with home beautification.

Placement for Farm Experience

This activity is sometimes called a "supervised farm work program." From the student's point of view it consists of experience gained through employment on a farm or plantation. It is usually carried by boys who do not have adequate facilities at home or elsewhere for other forms of supervised farming, especially boys who live in a plantation village or boys who live in town. The student may, or may not, be paid by his employer for the work he does, but the employer and student should understand that the boy is expected to get a variety of experiences, that these experiences are a definite part of his instructional program in the high school, and that the teacher of vocational agriculture will visit the boy from time to time as the program is carried out. The teacher has definite responsibilities for securing the cooperation of the boy's parents, making clear to the employer the nature of the program, aiding the boy in obtaining employment, checking on the work of the student, and for reporting the results of the program to the state office just as he would any other phase of supervised farming.

A student should not be considered placed for farm experience unless an agreement can be worked out that is satisfactory to the employer, the parents, the instructor, and the student. Merely working on a farm or plantation for wages does not constitute "placement." There should be, in addition to the agreement mentioned above, opportunity for obtaining managerial responsibility, or for advancement as the student's training progresses. Two examples of placement for farm experience follow:

1. A student in Hawaii who works on a sugar or pineapple plantation in an or-

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Training values in contests and exhibitions

RALPH MOWRER, Vo-Ag Instructor, Puyallup, Washington

The topic of contests is always a "hot" one. In one breath an instructor will bemoan the fate of being overworked and in the next he may be enthusiastically discussing a new type of contest he has read about or heard about in some other section of the state or country.

There are many arguments on how contests can be justified. Most often expressed are the benefits in the field of public relations and the training value to the boy. It is this latter feature, training value, that I wish to develop briefly.

We have all seen potential winning animals at the stock shows place with the 'also-rans' because of lack of preparation. We recall the student who failed to start in time to get an animal ready for public display. It was not the judge alone who noticed the manure stains, the lack of condition or the untrimmed feet, for the animal shown in the ring without previous training and fitting brings attention to the exhibitor as well as itself. The animal was not ready and neither was the boy. But some educational value should be there. If the student will observe, listen and think, he will learn from the judge, his more successful competitors and his instructor that planning and organization of detailed jobs are necessary for success even when you have a superior animal to start with.

Values From Planning

Another example of some valuable training taking place is the building of exhibits for fairs and celebrations. The following observations of some actual happenings at the Western Washington Fair serve as good illustrations.

Eight of the nearby FFA Chapters are involved in the building of horticultural displays that have, over the years, become quite intricate and involved. In this instance it is not the quality of the produce alone that is of utmost importance but the originality and attractiveness of the design as well.

Where are the values here in training the student?

Every boy gets a chance to help! This opportunity for one hundred per cent participation is not likely to be surpassed at any other time during the year. The call goes out for the finest of fruit and vegetables. It is here that the students learn that the biggest is not necessarily the best. Uniformity, trueness to variety, color, and freedom from blemishes overshadow the two simple criteria the boy has always used for judging produce, size and taste.

Imagine the willing cooperation of the students, seniors down through freshmen, in the bringing in of samples of what they think will best fill the bill. The response here is always more spontaneous and more complete than when they are asked to bring a newspaper clipping or some machinery to repair. They rise to the challenge that something of theirs may be good enough to help make up the exhibit which will be in competition with seven other Chapter exhibits and be viewed by some 40,000 people daily.

The group makes the choice. The gathering, sorting, washing, polishing and arranging in trays is an example of planning, though of course some groups do it much better than others. If not well organized this stage of the enterprise finds some important details not even being worked on while other and relatively important jobs will have so many boys' attention that the work they turn out is poor.

Our boys have observed and remarked on the unorganized haste of one Chapter which comes late and leaves early the night the displays are set up at the fair grounds. This Chapter hurried in, worked in feverish haste and walked away rapidly from the exhibit which even the untrained eye could see lacked quality and appeared unfinished. The general consensus seemed to be voiced by the boy who said, "I don't believe I could walk away from a booth like that and go home and sleep."

These same boys noticed another Chapter which came late and left early. But here was a difference. This Chapter had spent some rewarding time and effort at their Ag building putting the booth together in sections, as much as possible. They trucked the "makings" to the fair, carried them into the display building, assembled, adjusted, put on the finishing touches, cleaned up what little mess they had made and went home proudly. Their exhibit drew much attention from the onlookers and our boys agreed that it was "the one to beat." One fellow, slightly awestruck by the precision of the whole thing said, "Looks like the army engineers organized that one!"

Of course the instructor had a lot to do with it, but all of the several dozen boys who contributed to its success had been exposed to a wonderful example of long range planning, organization of detailed jobs, selection and cooperation. They had pride in a job well done.

Parliamentary Procedure Contest

Another facet of the many sided problem of contests and exhibitions is the parliamentary procedure contest. Our department and school administration is in complete accord with the policy of taking enough class time to give a thorough working knowledge of parliamentary practice and encouraging its use at all FFA meetings.

Our Chapter has entered parliamentary contests and has been satisfied with the success of our teams. And it cannot be denied that the old spirit of competition is aroused in our boys when it comes time to choose the team. It gives the whole Chapter a little more "zip."

But the experiences gained are of tremendously more value, in my mind, than the gaining of another banner; or the quickening of the Chapter pulse at the time of the team try-outs.

The year began with a demonstration for the district convention of a prominent service club. Then the fellows appeared before the Grange and felt right at home—as they should have. By request of a top notch English teacher in our system the FFA worked one full period with each of her five senior English classes. There was an immense satisfaction in the last demonstration, which was before a labor union business meeting.

This can be listed on the books as good public relations, but the fact that more than just the team appeared on these occasions made it more than advertising for the FFA. A large number of boys got some real benefits because it was not limited to the officers. Anyone willing and interested was welcome to attend and participate. We had confidence in even the freshmen because they had pitched into the subject with enough confidence that they could contribute something in a demonstration.

Often these demonstrations were at such a time that conflicts prevented several of our officers and leaders from participating. There wasn't always a snappy crew possessing beautiful voices, brilliant minds and superb poise. But they put on good demonstrations and got training that will stamp them as leaders in the years to come.

Values Observable

Proof is already evident of this claim. All instructors can undoubtedly name FFA members who were not necessarily top leaders but who, through superior knowledge of parliamentary law and the assurance that goes with it, became leaders in other organizations, both in school and out. Instances are many of FFA members being delegated responsible positions in adult groups because the membership is impressed with their knowledge of how a meeting should be run and their poise in putting it into practice.

Now if a considerable amount of time in class is spent on the study of parliamentary procedure, the question is bound to arise, "Could not the same results be gained without entering contests and giving exhibitions?"

We feel that the answer is No! The results would not be as satisfactory nor far reaching. Most students are motivated in class to learn only enough to get what they consider a satisfactory grade. There are plenty of contests that our department does not enter and it couldn't very well be classed as "contest happy." The point I wish to make here is on the value of a contest or exhibition as such.

The desire to excel goes beyond the boundaries of the classroom or even the nation. It is world-wide. It is natural for

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Developing a dairy judging team

A. E. FRAZIER, Vo-Ag Instructor, Burleson, Texas

Judging dairy cattle is simply being able to differentiate between individual cows of good type and high productive ability and those that are inferior in this regard. It is an art which takes sound judgment and a lot of practice and there is no mathematical formula or congregation of percentages that will help. Judging is sound reasoning. Within the limits of these statements is the all important fact that a student must understand the functions of each part of the cow and be able to weigh and evaluate the degree of differences that exist between one cow and another as compared to an ideal.

No boy can hope to be proficient in the art of judging unless he has the desire to know intrinsic values in dairy cattle for this desire puts the mind in a very receptive state for the most effective learning. If this desire is strong the battle is half won. Unless this desire reaches beyond the class room and the judging team the real ability to judge accurately and to see clearly may never be realized.

I was fortunate in having teams to represent Texas in national competition at Nashville in 1949 and at Waterloo in 1951. I have found by experience that for a boy to be proficient in the art of judging he must have certain definite qualities. He must have fixed in his mind a true mental picture of ideal types or standards of perfection for each breed. He must understand the functions of each part of the cow and how each part contributes or influences the appearance and productiveness of the animal. To be able to do this he must possess a keen power of observation. On the basis of observation he then must have the ability to so analyze that his placings and reasons are wise and logical. He must have independence of thought for otherwise he cannot improve upon his ability to judge. Then too, he should be able to give effective reasons. To be able to do this he must observe accurately, have an effective vocabulary, use an orderly system and talk in a conversational, yet convincing, manner.

How These Qualities are Developed

How are these qualities to be developed? Boys enroll in class with certain interests and usually with some knowledge of a dairy cow. They also have a vocabulary, though limited it may be. Some may show signs of interest while others may be rather dormant in this respect. Create interest by visiting dairymen who are successful in this agricultural pursuit and have these men tell of their start, their income and their cattle values. Bring to their attention what other Future Farmer boys have accomplished with dairy cows. Tell of the stimulating, competitive skill they may develop in showing, in contests and in supervised farming programs. Recall places where teams of the past have gone and the awards and recognition they have received. Refer to students now in college who are paying their expenses out of profits derived from dairy enterprises which were at one time a part of their Future Farmer work. Emphasize that a working knowledge of dairy cattle is a necessity to such an accomplishment. I find that the boys respond to this created interest and will express their desires and willingness to learn so that they may also be able to judge proficiently.

Start these boys on a study of the different parts of the dairy cow so that they will become familiar with names and locations. Have the boys sketch pictures on sheets of paper and name and locate the different parts. Tack a large picture of an ideal cow on the bulletin board and point to the various locations and have the boys name the parts so located. Usually two class periods is sufficient for this phase of their training.

The boys are now ready to learn the qualities of an ideal cow and the breed requirements as stipulated by the various breed associations. Secure score cards and pictures from these associations and study first the characteristics of the ideal representatives for each breed. Call attention to size, ruggedness, color, horns and balance. Notice the points that are stressed or emphasized on these cards. I find that these score cards differ only slightly from one breed to another with the exception of those characteristics common to the breed. I usually spend about one week on this study. Pictures may be held up before the class for identification of the breed and it is at this time that the breed characteristics may be enumerated orally. Miniature models, made to scale, can be purchased at most large department stores. They make excellent teaching aids in helping to clarify the breeds in the boys' minds.

Establishing Significant Relationships

The next step, that of getting the boys to learn what and how each part contributes to the appearance and productiveness of the cow, is of vital importance. Putting it another way: what do the heart and lungs contribute to the longivity of high production? What contributions are made to this demand by the capacity of the body, the mammary system, dairy temperament and scale? I usually contrast the cow to a manufacturing plant. The heart and lungs provide its stability to last; the body capacity as its storage space and ability to handle quantities of raw materials; its mammary system as its ability to process the raw materials for quantity production of usable materials; dairy temperament as its efficiency of operation and the build and appearance as its soundness and beauty of construction. Elaborate upon each of these contrasts. The more this is portrayed to the boys the clearer will be their vision of the importance of the existance of a harmonious relationship between all parts of the cow. If it takes four hundred pounds of blood flowing through the udder for each pound of milk produced, should there be any doubt in the minds of the boys as to the important role played by the heart and lungs? The learning of the functions of the parts of the cow is the step that is easiest to get over to the boys, but it requires a much greater amount of research than any other step in the process of their training. Use film strips, charts, diagrams and sound films. I recall one film, "The Science of Milk Production," that is especially good for this purpose. In the book "Livestock Judging" are to be found many judging terms and phrases that the boys should learn. These terms and phrases become their judging vocabulary, and as such, the reasons for their placings will be affected in the same ratio as is their knowledge and usability of these terms and phrases. Use pictures for placing practice and for the organization of oral and written reasons. Objective tests should be given periodically. Repeat this type of practice until it is realized that the boys are emphasizing the major differences between individual animals within a class, and until the reasons for their placings are equally consistant and effective before attempting to put this learning into effect on real animal classes. *Hoards Dairyman* and *Better Farming Methods* magazines are good sources of pictures for use in accomplishing this step in the training program.

Practice is Necessary

The important job now is to practice and continue to practice toward the ultimate objective of attaining consistancy in placings and in the giving of reasons for such placings.

When it is determined that uniformity is accomplished then regular judging practice will be necessary to keep up the efficiency attained. When contest time arrives the record of the boy's achievement should form the basis of the selection of the team. Regardless of whether or not a boy makes the team he should be proud of the knowledge gained for this knowledge is the fruit of his labor. □

Training values - - -

(Continued from page 20)

a boy to wish to show the best animal in its class, to want to be at least a small part of one of the top horticultural exhibits at the fair, or to meet the challenge of handling organized meetings.

Supplements Classroom Instruction

Briefly then, the classroom does not stimulate these values to the extent that contests or exhibitions will. As long as the individual has this intense desire to gain praise and excel, he will seek larger arenas in which to try for success. He finds a much better field for his endeavors outside the classroom. Many teachers who question the value of taking a chosen few to a contest many miles distant have motivated their pupils by bringing contests into the classroom.

When a student knows he is going to be on public display he starts to prepare himself so he will make a good showing. This preparation is part of the educational value of contests and exhibitions. He has ample opportunity to learn and be trained in selection, planning, organization, leadership and cooperation. □

Factors associated with the Vo-Ag student's desire to remain on the farm*

WALTER T. BJORAKER, Teacher Education, University of Wisconsin

Walter T. Bjoraker

SECTION 10 of the Smith-Hughes Law states that the agricultural education with which we are concerned shall be designed to meet the needs of persons over fourteen years of age—"who have entered upon or *who are preparing* to enter upon the work of the farm—." In our high school day classes, which are in most cases the core of the Vo-Ag program, we are concerned with those persons preparing to enter farming. Experiences have shown that not all students enrolled in agriculture will go into farming. If the teacher can identify the factors in a student's farm and family background that are significantly related to the student's desire to remain on the farm, he can much more effectively develop an individualized course of study and he can better give meaningful vocational and educational guidance. In order to determine whether some of the factors commonly thought to be associated with the level of desire of farm boys to remain on the farm were significant, a random sample of 415 junior and senior students of vocational agriculture in the high schools of Minnesota and Wisconsin was studied.

The data were collected through the use of tests, rating scales, and questionnaires. The information secured included: (1) the level of desire to remain on the farm, (2) the attitude toward farming, (3) the measured mental ability of the student, (4) the socio-economic level of the family, (5) the size of the family, (6) the formal educational level attained by the parents, (7) the tenure status of parents, and (8) the size of the farm business in terms of productive work units.

The following instruments were employed in collecting the data: (1) the Henmon-Nelson test of mental abilities, (2) Sewell's Socio-Economic Status Scale, (3) Myster and Werts' Attitude Toward Farming Scale, (4) a five point scale showing level of desire to remain on the farm, and (5) a farm and family background questionnaire.

Using the size of the high school vocational agriculture departments, the homogeneity of the variability and of the means was tested. The sample showed that no real difference existed between the sample and the parent population. Chi square procedure was used in analyzing the data, setting a five per cent level of significance. The corrected coefficient of contingency was determined for all significant chi squares. Yules' Q was calculated in order to determine the sign. The inter relationships were analyzed and, when the data were amenable to the use of the statistic, the Pearson product-moment correlation was used. In considering farm ownership, Biscrial Correlation was used as an estimate of the Product-Moment Correlation.

Eight specific null hypotheses were tested. The findings revealed there was a significant association between the following:

1. The boy's measured attitude toward farming and his expressed level of desire to remain on the farm.
2. The size of the home farm in acres and the boy's level of desire to remain on the farm.
3. The size of the farm business as expressed by the number of productive work units in the farm and the boy's level of desire to remain on the farm.

There was no significant association at the five per cent level between the following:

1. The measured mental ability and the level of desire to remain on the farm.
2. The socio-economic level of the farm and the level of desire to remain on the farm.
3. The size of the family, and the level of desire of the boy to remain on the farm.
4. The formal education level attained by the parents, and the son's level of desire to remain on the farm.
5. Farm ownership by the parents, and the son's level of desire to remain on the farm.

These data failed to show significance at the five per cent level for many of the factors commonly considered important in the decision making of the student. In many cases, the association, while significant, was at a rather low level. In considering the level of desire of farm boys to remain on the farm, it tends to be associated with a large farming unit, and a large farm business. In viewing the total findings, it appears that it is not the contribution of a large farming unit to increase income that was significant, but rather the nature of the responsibilities of the boy in these large businesses. Where the student had greater managerial responsibilities and greater opportunity for doing a "man's work," the level of desire to remain on the farm was higher. This point of view was supported by the discovery of no significant relationship between the level of the socio-economic level of the farm family.

In general, the boys' over all attitude toward farming as an occupation and a way of life is probably more important in relationship to his desire to remain on the farm than the specific personal, farm and family factors considered in this study. □

*This article based on Ph.D. thesis, University of Wisconsin.

Supervised farming - - -

(Continued from page 19)

ganized training program during part of the school day would qualify for "placement for farm experience" provided the activity meets the other conditions outlined above.

2. A city boy finds employment on a dairy farm where he obtains a variety of experiences in milk production, for which he may or may not be paid. If this activity meets the conditions outlined above, it would be classed as placement for farm experience.

Other Terms

Several other terms are sometimes used to describe phases of supervised farming, such as: "Major Project," "Minor Project," "Contributory Project," "Supplementary Project," "Continuation Project," "Home Project," "Individual Project," "Group Project," "Class Project," "Brother-Sister Project," and "Farm-Family Project." Most of these have been in use almost as long as vocational agriculture has been taught in our high schools and need not be defined here. If, however, this article leads to a better understanding of the newer terms used in supervised farming, it will have served its purpose. □

Guest Editorial

(Continued from page 23)

people to change their habits . . . . to sell them on a new product, or a new technique.

It means that it takes a lot of repetition to get any job done. It means that you must gear your program to take advantage of every method that has proved to be valuable in getting people to change their habits. For instance hog producers in Iowa learned about antibiotics by these methods:

By talking to others	42.6%
By reading about them	35.1%
By listening to the radio	12.5%
Through Night Schools	8.3%
By other methods	1.5%

The survey also showed that 20% talked or listened to other farm operators, 7.8% to veterinarians, 42.7% to sales and service people, and 6.4% to teachers, and 20.6% didn't talk to anyone.

From these figures, you can readily see that you cannot expect to "keep the fires burning" by yourself. They also show you how you can double and triple your effectiveness by enlisting the help of leading farmers in your area, the local veterinarian, sales people, local radio stations and newspapers . . . . they all have a big influence on agricultural people.

Are your "fires" burning as brightly as they might be? □

BOOK REVIEWS

WEED CONTROL, by Wilfred W. Robbins, A. S. Crafts, and R. N. Raynor, 2nd Edition, pp. 503, illustrated, published by McGraw-Hill, list price $8.00.

This text was revised to keep apace of the rapidly developing field of chemical weed control. The new edition streamlines the section of the book covering the economics and ecology of weeds; includes the newer chemicals and pertinent research in this field; treats brush control, aquatic weed control, and pre-emergence methods in chemical weed control, and revised illustrations show recent developments in chemicals and modernization of machinery used in weed control. —APD

* * *

60 POWER TOOLS AND HOW TO BUILD THEM, pp. 144, profusely illustrated, published by Popular Mechanics Press, 200 East Ontario Street, Chicago 11, Illinois, list price $2.50.

This book is compiled and edited by the editors of Popular Mechanics Magazine and will take the place of the previously published FORTY POWER TOOLS. Detailed plans, diagrams and illustrations will assist craftsmen in building power tools and performing repair and building projects in woodworking, concrete, furniture and other areas. —APD

Commemorative Stamp Approved for FFA

POSTMASTER General Arthur E. Summerfield has announced that a special three-cent postage stamp will be issued this year in commemoration of the twenty-fifth anniversary of the Future Farmers of America.

The announcement climaxed more than a year's campaign by FFA members and their leaders throughout the country to have a special stamp issued during the anniversary year. Hundreds of letters requesting the stamp were received by the Post Office Department. It was included in the first group of six commemorative postage stamps approved and announced by the new Postmaster General.

Officials of the national FFA office and the Post Office Department are working on the design of the stamp. The exact date and place of the first issue is still under consideration, but in all probability it will be at Kansas City, Missouri, during the national FFA convention, October 12-15. The schedule calls for printing 110 million of the stamps.

After the first day, the FFA stamps will go on sale in other post offices where the local postmasters have requested it. A kit of suggestions for local FFA chapters to use in obtaining local FFA promotion and publicity in connection with the stamp issue is being prepared by the national office and will be sent to State Associations for further distribution to the local chapters. □

The Cover Picture

This picture was taken during the tour made by the National Officers of the FFA in which they visited the plants of several of the donors to the FFA Foundation. Here the officers are being shown through the Engineering Building of the General Motors Technical Center.

The growth in the FFA and the Foundation is one of the many directions in which Vocational Agriculture has made marked development.

The photograph was furnished by John F. Dancke, Director, Department of Public Relations, General Motors Corporation.

Enrollment in Vo-Ag

The scope of the program in vocational agriculture is revealed in part by the data shown below. These data were compiled from the Digest of Annual Reports of the U. S. Office of Education for the year 1950-51, and furnished by L. M. Sasman, Supervisor in Wisconsin.

	All-day	*Young Farmer*	*Adult Farmer*	*High School Instructors*	*Av. per H. S. Instr.*
Alabama	13,352	00	10,103	308	43
Arizona	1,527	00	751	35	44
Arkansas	15,554	1,169	13,858	333	47
California	12,184	00	5,545	347	35
Colorado	2,340	222	254	65	36
Connecticut	570	00	159	20	28
Delaware	801	00	88	22	36
Dist. of Columbia	58	00	178	2	29
Florida	9,394	158	1,023	176	53
Georgia	17,147	548	42,133	390	44
Hawaii	1,583	192	406	43	37
Idaho	3,135	00	00	60	52
Illinois	16,875	903	8,628	495	34
Indiana	10,665	43	1,226	330	32
Iowa	8,031	750	11,229	190	42
Kansas	6,257	00	00	182	34
Kentucky	10,699	2,683	3,171	239	45
Louisiana	12,027	4,314	9,182	303	40
Maine	1,499	00	30	46	33
Maryland	3,613	00	831	79	46
Massachusetts	1,300	00	401	88	15
Michigan	11,110	1,064	6,671	284	39
Minnesota	9,833	1,650	3,759	196	50
Mississippi	13,144	451	30,547	389	34
Missouri	10,874	1,057	7,181	243	45
Montana	2,324	00	12	55	42
Nebraska	4,684	412	198	122	38
Nevada	310	149	119	12	26
New Hampshire	745	00	00	26	29
New Jersey	1,666	10	159	44	38
New Mexico	1,777	00	00	54	33
New York	9,507	00	1,511	310	31
North Carolina	26,575	2,858	7,086	543	49
North Dakota	1,747	169	751	47	37
Ohio	9,699	1,491	2,295	287	34
Oklahoma	13,012	749	10,977	352	37
Oregon	3,499	50	245	79	44
Pennsylvania	11,840	1,384	00	324	36
Puerto Rico	6,523	645	681	111	59
Rhode Island	435	00	00	00	43
South Carolina	11,067	9,101	42,949	369	30
South Dakota	2,438	00	149	62	39
Tennessee	22,095	00	5,473	321	69
Texas	37,994	4,567	56,214	1,026	37
Utah	3,656	867	2,046	66	55
Vermont	720	103	183	28	26
Virginia	9,757	1,844	5,553	297	33
Virgin Islands	51	00	00	1	51
Washington	7,107	42	3,087	165	43
West Virginia	5,391	126	17,990	122	44
Wisconsin	15,959	2,794	4,054	282	57
Wyoming	1,221	60	10	47	26

Tips that work...

How Plans Promote Interest

We are studying "Farm and Home Improvement" in our Adult class. Included in the course is an arrangment of buildings, drives, fences, shrubs, dwelling, loading chute, cattle guard, lots and other things which make up the farmstead. To keep the men and women "on their toes" I provided each family with a cheap loose leaf notebook for filing reference materials, bulletins, class notes and in addition several sheets of cross section paper. I charged each one with the responsibility of drawing their ideal farmstead including varieties of shrubs, trees and flowers, and floor plans of the major buildings.

The plan worked fine and there was considerable reviewing at the beginning of each meeting as the result of a desire for definite information to use in their drawn plans.

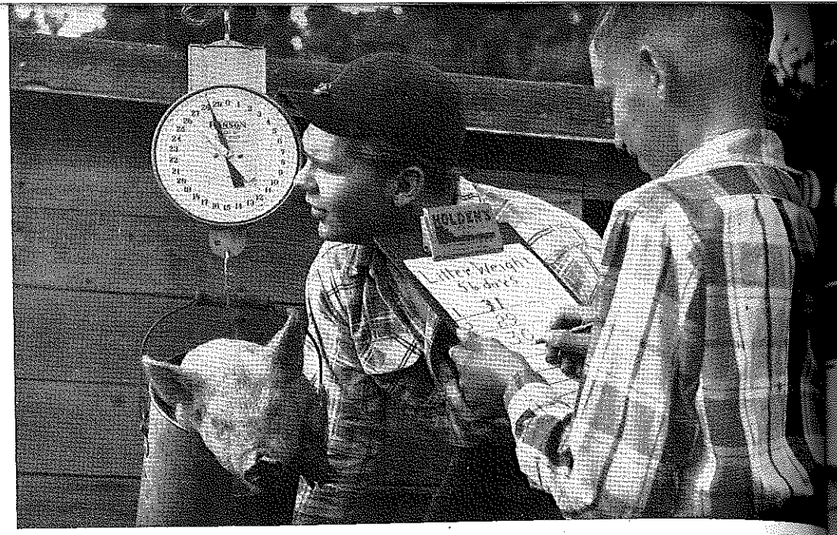
A. T. Johnson
Vo-Ag instructor, Moberly, Mo.

PICTURES of the month...

A contest open to all teachers of Vocational Agriculture and farm veterans

"WEIGHING IN"
C. W. Dowling, St. Peter, Minn.
Camera: Ansco Automatic Reflex
Film: Ansco Supreme
f11 at 1/100
(A good picture—one that tells a story)

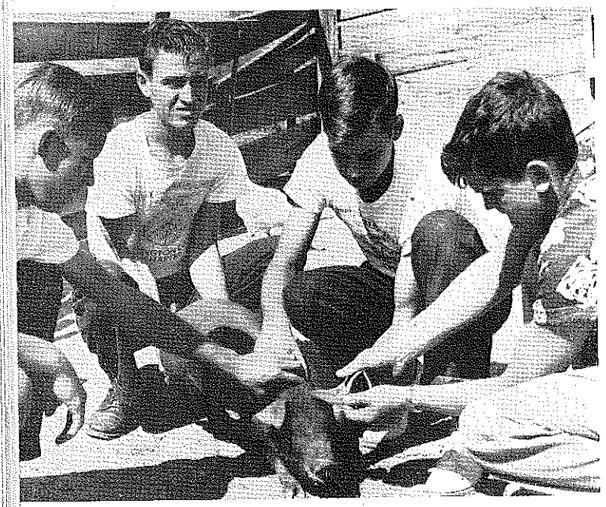
FIRST PLACE →



"PIG CHAIN SELECTION COMMITTEE"
A. B. Foster, Washington College, Tenn.

↓

Camera: Crown Graphic
Film: Superpanchro Press—Type B, f16 at 1/100



"LET'S TIE KNOTS"
A. B. Foster, Washington College, Tenn.

↓

Camera: Crown Graphic
Film: Superpanchro Press—Type B, with 25 Flash bulb.

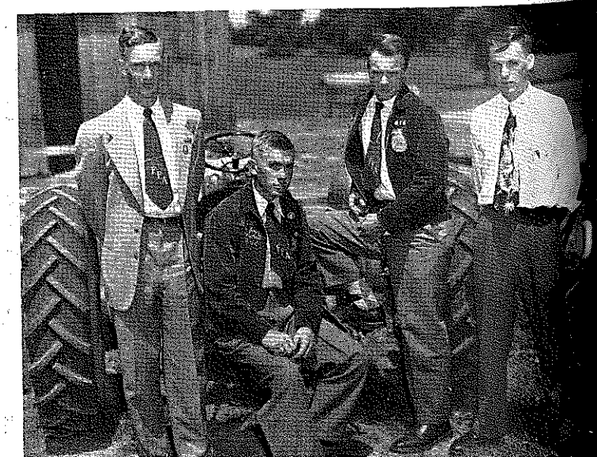
"FFA DEMONSTRATION"
John H. Klipstein, Wausau, Wis.
Camera: Speed Graphic 4 x 5, f16 at 1/50

↓

"STATE FARMER CANDIDATE"
Warren C. Duncan, Lawrenceburg, Ky.

↓

Camera: Busch Pressman
Film: Super pan press, Type B Press 25 Bulb.



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School and Community Services Through Vocational Agriculture