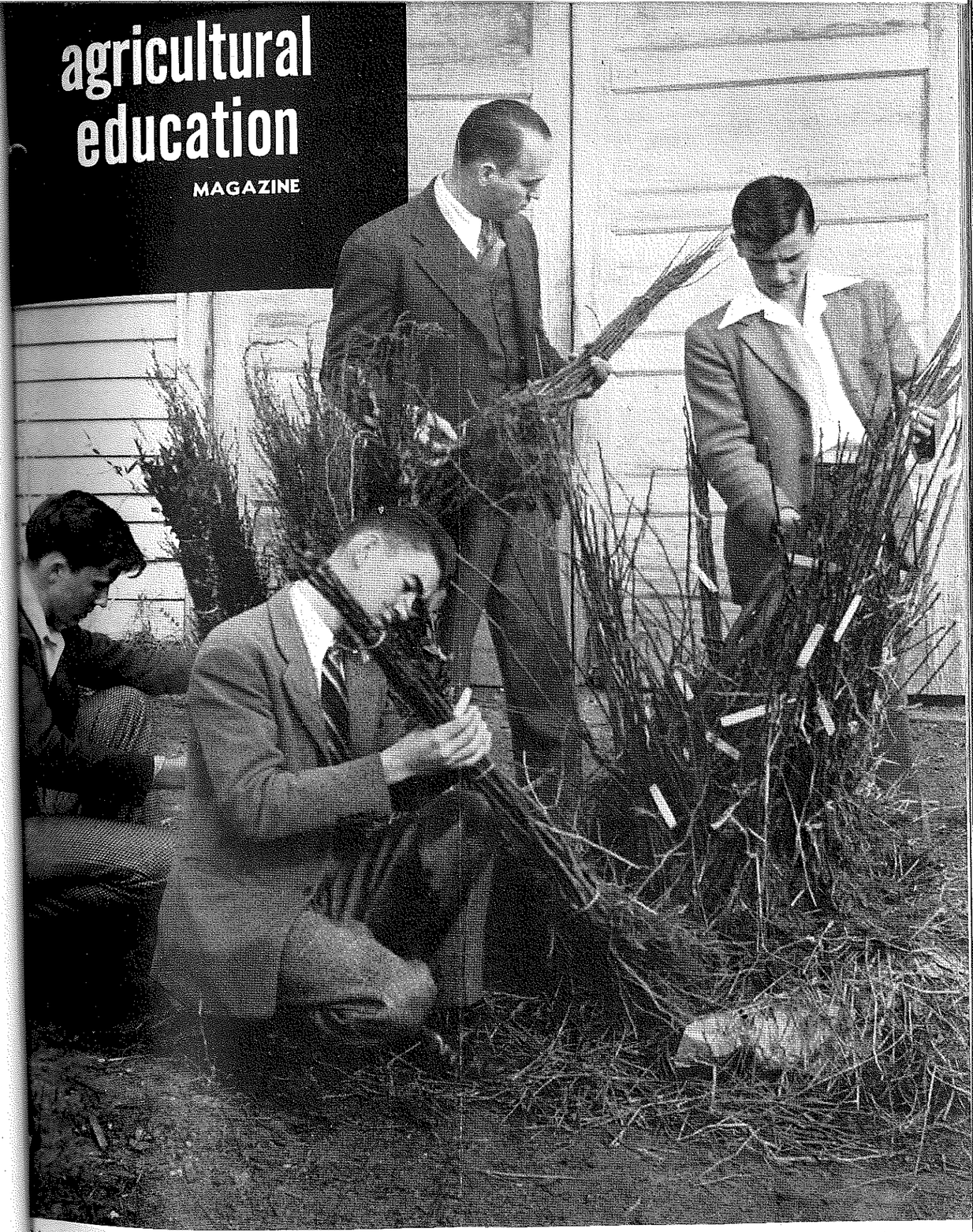
agricultural education

MAGAZINE



Members of the F.F.A. Chapter at Stedman, North Carolina, unpacking a cooperative order of fruit trees.
—Photograph by J. K. Coggin

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Editorial Comment

Whither Contests

Roy A. Olney

FARMER Ashburn runs a farm. It is a dairy cattle and poultry farm with additional crops and other enterprises to make up a well-balanced farm business. It is located in a certain state but might just as well be in any one of the other 47 states. It could have been a beef cattle, swine, crop, or any combination of enterprises farm. Farmer Ashburn is concerned with buying and raising animals and varieties that will produce high yields; and, in addition, he desires to grade the products grown so that they will bring the greater return, thereby making a high labor income. He is primarily interested in his own farm. It is true that he makes comparisons with his neighbors and other farmers in order to improve his own situation, but it is not his primary concern to compete openly with them. How many farmers enter judging contests or the show-ring business in your area or in the United States as a whole? Farmer Ashburn does attend sales, fairs, auctions, and the like. The prizes for participation in such events are reflected in the improved product he buys or the return from what he sells. Other farmers are equally shrewd and intelligent, but the more formal and systematic training and experience which it is possible for him to receive will be reflected more in his earnings from better stock or products than in any awards of cash that may be given him by some organization. Relatively few farmers in the United States make large earnings from prize awards.

Does this story have a lesson for us in vocational education in agriculture? How should it affect the training of the 250,000 prospective future Farmer Ashburns who are enrolled in the agricultural classes? Most teachers believe in and are trying to implement their work to accomplish the major objective of vocational agriculture; namely, to provide instruction in the farming of the school area, which will meet the needs and enable all pupils who may enroll for work, under the direction of the teacher, to prepare for, enter upon, and progressively establish themselves in a profitable farming business.

With the resumption of the national contests for Future Farmers of America in 1947 it is important at this time that everyone in vocational agricultural education give serious and constructive thought to the problem. What every teacher of agriculture should do is to provide the training and experience that each pupil needs which will enable him to become a better and more efficient farmer on a particular farm. We should not place undue emphasis upon show and artificial awards that are of less value to most farmers. But "sticking to" our real job of teaching boys the actual problems, which may often be more difficult to do, will over an extended period of time be of more value than those received at some bizarre event that passes quickly and is soon forgotten.

A national committee has been working on the revision of F.F.A. contests. It has been cognizant of the fact that improvements should be made. We believe that a start in the right direction has been made. The new features to be introduced into these contests should be given a fair trial in order to make changes that will be of most value to the farmers of the future.

In addition to the increased emphasis on making the contest more educational for pupils studying vocational agriculture, an attempt has been made to recognize groups in each contest. With the limited experience of these boys, the lack of facilities and time available for training and the small number of classes to be scored make it difficult to pick the best boy or team. The broader grouping will give deserved recognition to more boys and teams.

We are entering upon a new era for the improvement of contests. Can we make these contests more educational and still maintain the true competitive spirit of a Farmer Ashburn? There are still many unanswered questions. *Whither Contests?*
—Roy A. Olney, Cornell University.

Alpha Tau Alpha Expands

C. S. Anderson

ALPHA TAU ALPHA, the national professional and honorary society of agricultural education had its beginning in 1921 at The University of Illinois. Until the war interrupted its years of steady growth and progress, the fraternity had chartered 17 chapters in teacher-training institutions and had a national membership of over 2000 men. In some states all members of the supervisory and teacher-training staffs and the leading agricultural teachers wear the key of Alpha Tau Alpha.

During the war many Alpha Tau Alpha chapters were in a state of suspension due to the low student enrollment in universities and colleges. Now, with increased enrollments, the fraternity is not only rapidly reactivating the former chapters but is preparing for widespread expansion. There is a genuine felt need for the organization wherever men are in training to become teachers of agriculture. The fraternity emphasizes the highest scholastic and professional standards and ideals in agricultural education; develops more intimate acquaintances and closer relationships among men who are planning to teach vocational agriculture; aids and encourages prospective teachers of agriculture in their plans to serve as efficient rural leaders; and fosters a fraternal spirit of helpfulness and service among students who are preparing to teach vocational agriculture, those pursuing graduate study in agricultural education, and administrators and agricultural teachers in the field.

On many campuses Alpha Tau Alpha has its counterpart in Omicron Nu and Phi Upsilon, two national, professional-honorary organizations in home economics; in Iota Lambda Sigma, the national, professional-honorary fraternity for industrial education; in Phi Delta Kappa and Kappa Delta Pi in the field of general education; and in Gamma Sigma Delta and Alpha Zeta in the broad field of agriculture.

At the 1946 American Vocational Association meeting in St. Louis a conclave of chapter delegates was held and the following national officers elected:

President—Dr. C. S. Anderson (Eta Chapter) The Pennsylvania State College

1st Vice-President—Prof. R. W. Canada (Zeta Chapter) The Colorado State College

2nd Vice-President—Dr. H. M. Hamlin (Alpha Chapter) The University of Illinois

Secretary-Treasurer—Dr. M. C. Gaar (Iota Chapter) The University of Louisiana.

Student groups and faculty members in agricultural education who are interested in establishing a chapter of Alpha Tau Alpha at their institution should communicate with Dr. M. C. Gaar, professor of agricultural education, The University of Louisiana, University, Louisiana.
—C. S. Anderson, The Pennsylvania State College.

Articles Featured in Issue

ALTHO readjustments incident to the re-establishment of contests and achievement events on national and state bases are for the most part in the planning stage, an effort has been made to present in this issue points of view regarding the place and function of such activities in the program of vocational agriculture. There are those who would prefer to eliminate contests altogether, another minority would prefer to see such activities handled much as was the case before the war; a majority, evidently, favor the revamping of all contests so as to make them more educational.

The editors would have our readers evaluate the editorials and the several accompanying articles on contests. They should like to use additional contributions on the general subject as developments are forthcoming.

Some Ideas of Illinois Teachers of Vocational Agriculture Regarding Contests[1]

MELVIN HENDERSON, Teacher Education, University of Illinois, Urbana

IN 1946 the Illinois Association of Vocational Agriculture Teachers appointed a committee to study judging contests and similar activities. The committee was composed of teachers of vocational agriculture from different areas of the state, the president of the I.A.V.A.T., and three representatives of the state supervisory and teacher-training staffs.

At the first meeting the committee unanimously agreed that

1. a survey or questionnaire should be sent to teachers of vocational agriculture in an attempt to secure opinions before recommending new contests or modification of old ones;

2. all teachers in the state should be given a chance to express their opinions, and not a selected few;

3. the survey was to be completed before the 1946 state judging contest;

4. teachers were not to be asked to sign questionnaires; and

5. the help of the teacher-training advisory board was to be solicited in making the survey.

The reason for completing the survey before the state judging contest was to reduce the possibility of replies being biased by the results of that contest. Since the state judging contest was last held in 1941, it was thought that most of the trivial complaints would have been forgotten.

The committee was not interested in opinions of particular teachers. Consequently, the committee decided that if the questionnaires were not signed, teachers might feel more free to give their opinions. Surveys were coded so that additional information could be obtained if needed.

Because the teacher-training committee had been of assistance in the making of previous surveys, it was considered advisable to solicit their help. This committee, which acts in an advisory capacity to the teacher-training groups in agriculture (Agricultural Education in the College of Education and Vocational Agriculture Service in the College of Agriculture), consists of one member from each of the 20 sections into which Illinois is divided for administration of the program in vocational agriculture. Of the 342 questionnaires distributed, 302, or more than 88 percent were returned.

Teachers were told to omit answers to questions which they did not wish to answer. Consequently, the percentage of replies to each question was based on the number replying to the question and not on the number of questionnaires returned.

Preliminary Part of the Survey

Teachers were asked to check whether the state judging contest should be

(1) continued as before[2],

(2) discontinued,

(3) radically changed, or

(4) supplemented by or combined with other types of contests and activities.

In replying, 29.8 percent indicated the contest should be continued as before; 7.3 percent, that it should be discontinued; 8.9 percent that it should be radically changed; and 54.0 percent that it should be supplemented by or combined with other types of contests and activities.

Of the 302 reporting, 254 indicated that their teams had participated in judging contests; 26.4 percent had participated one year; 29.1 percent, about 5 years; and 44.5 percent, 10 years or more.

Of the 278 teachers who indicated whether or not their teams or individuals had ever won state or national contests, 15.8 percent had won and 84.2 percent had not.

Objectives of Contests

Thirty-four objectives of contests were listed, and the teachers were asked to rate each objective 1, 2, 3, or 4. The teachers were also given an opportunity to list and rate other objectives. The 10 objectives rated No. 1 by the largest percentage of teachers were as follows:

1. Providing an opportunity to see good livestock, new crops, and modern machinery and equipment

2. Improving livestock and crops thru better selection

3. Developing ability to make good judgments

4. Improving judgments by fixing in mind ideal standards or types

5. Training students in habits of accurate and systematic observation

6. Developing honesty

7. Providing an opportunity to learn something new in a definite field of activity

8. Creating interest in vocational agriculture

9. Developing good sportsmanship

10. Providing an opportunity for boys to become better acquainted with the University of Illinois.

The five objectives that were rated lowest (No. 4) by the largest percentage of teachers were as follows:

1. Comparing the work of one teacher with the work of others

2. Definitely ranking winning individuals (or teams)

3. Giving special training to small groups of boys on teams

4. Making possible a trip away from home

5. Developing winning teams.

Types of Contests Favored by Teachers

One part of the survey was an attempt to determine the types of contests favored by teachers. Thirty-seven possible contests were listed, and teachers were asked to rank each as a means of accomplishing "what you have said should be the aims of such contests." Again No. 1, 2, 3, or 4 was to be used to indicate the importance of each.

One type of contest that teachers were asked to rate related to identification of tools and hardware, insects and diseases, breeds of livestock, trees, shrubs and flowers, cuts of meat, soil types, feeds, and seeds and plants.

Contests that they were asked to rate which involved manipulative skills were milk testing, mixing feeds, pruning, seed treating, soil testing, using the square, welding, and tractor trouble shooting.

Teachers were also asked to rate contests relating to selection on physical appearance. These included selection of dairy cattle, fat stock, poultry, field crops, milk, tools, fruits and vegetables, and eggs.

A fourth group of contests which teachers were asked to rate related to making managerial decisions or interpretations. These included deciding on feeds to use for given situations, selecting animals by pedigree or production record, determining fertilizer needs on the basis of soil tests, deciding upon conservation practices needed, and deciding upon crop rotations to use.

Contestants judging dairy cattle at the 1946 state contests in Illinois

The fifth group of contests which teachers rated related to demonstrations. They included demonstrations such as testing milk, swine sanitation, poultry culling, inoculation, testing soil, home beautification, use of the square, and electric wiring.

From the answers, it appeared that most of the teachers thought that any one of the 37 contests listed was suitable as a means of accomplishing what they considered to be the main objectives. The contest that was rated 4 (of least importance) by most teachers was so rated by only 18.2 percent; it was rated by 12.8 percent as 1, and as 2 by 35.8 percent.

Teachers were told the contests listed were only examples and were asked to list and rate additional ones. The additional ones suggested relating to identification were as follows: identifying symptoms of plant nutrient deficiencies, identifying symptoms of common diseases of animals, identifying plants of various weeds, identifying fruits and vegetables, identifying dairy products, identifying grades of market animals, identifying market grades of grain, and identifying lumber types.

Additional contests suggested that involve manipulative skills included reading blueprints, showing animals, preparing animals for show, plowing, contouring, correct milking, driving tractors, making hitches, splices and knots, husking corn, castrating animals, grading eggs, computing pulley sizes, sharpening tools, mechanical drawing and laying out and sawing a rafter.

Several contests relating to selection by physical appearance were also added. These included selection of feeder cattle and feeder sheep, grain, cuts of meat, hybrids for seed, and lumber.

Additional contests were suggested relative to managerial decisions. These included calculations and inferences to draw from D.H.I.A. records, deciding on the number of animals to keep for certain number of crop acres, deciding how best to carry out livestock sanitation practices, selecting animals for foundation stock on the basis of pedigree and production, as well as physical appearance, and balancing feed production with livestock production.

In addition, demonstrative contests were suggested on proper milking; testing for mastitis; farmstead arrangement; parliamentary procedure; selection, care, and use of tools; use of the farm level; and vaccination of livestock.

Teacher Ideas Regarding Ways and Means of Holding Contests

Teachers were asked for their opinions on 13 questions relating to ways and means of holding contests. They were asked to answer "yes" or "no" or to add further comments if the question could not be answered by one word.

On six of the questions, 75 percent or more of all teachers answered "yes." These were:

1. Should some type of award be given?

2. Should the variety of contests be wide enough to interest practically any boy in at least one activity?

3. If new contests or activities are decided upon, should there be certain experimental sections where these can be tried?

4. Should contestants from different parts of the state judge on different days as a means of reducing the numbers in the contest at any one time?

5. Should there be a relatively large variety of judging contests and activities?

6. Should competitors be ranked (1, 2, 3, etc.) or grouped (A, B, or C)?

On one question 60 percent answered "no." That was "Should there be a limit on the number of contests which a given school will be permitted to enter in one year regardless of when the activities or contests are held?"

It would appear that the types of award favored by the majority of the teachers were ribbons for individuals and trophies or banners for teams.

One question asked was, "How many contestants do you think should be on a team?" The number suggested ranged from 2 to 10, 10 teachers indicating 2 and 1 indicating 10. Over 50 percent of those replying suggested 3. About 20 percent more indicated a range rather than a definite number, and the range included 3.

Teachers' Comments

The survey provided an opportunity for teachers to make comments, and many of them took advantage of the opportunity. Some of the comments were as follows:

1. Give boys and instructor a chance to *hear* the judges' reasons as they *see* the animals

2. We need better judges

3. There should be more contacts between University agricultural students and the high school boys during judging contests

4. This is a competitive world; these boys must learn to meet competition

5. The contest is past the teaching stage

6. Score students' placings on their reasons as well as on the placings

7. It is questionable whether contests develop good sportsmanship

8. Try to eliminate the policy of certain schools to win at any cost. All students must have the training, not just the teams

9. Insure some control over amount of time used in training. The winners are always those that have spent a great deal of time on training that could not be justified on the grounds that they were learning livestock selection

10. Allow no individual boy to judge two years on same team

11. Judging trips in community foster vocational support of farmers in department

12. I think the judging contest is of practical value. The boys are stimulated by rivalry, which is one of the important parts of competition

13. I would rank the trip to the University and the experimental station as the only real value of our state contests, except in occasional cases

14. I'm opposed to contests. Too often they are taken as a measure of the learning that's going on

15. We should be careful not to make the teaching of agriculture the *preparation for contests*

16. I am definitely not in favor of any competitive contests for students of vocational agriculture unless the element of guessing can be entirely eliminated, and this seems to be impossible

17. I think we can go too far, so that the whole contest will become a "bore" to the University and ourselves, plus cumbersome to operate

18. It would be impractical and very unwise to take all students to contests or on trips. A few (or more) car wrecks and casualties would do more harm than the good that would come from elaborate contests

19. One state contest should be much better than each of 20 sectional contests. To add a lot of sectional contests would take too many of the students' Saturdays or would interfere too much with other studies if held on school days. Also, travel expenses would be too high

20. Every school should be given an equal chance to see the agricultural setup at the University. Every boy should have a chance to see the Morrow plots, the agronomy plots, the orchards, the barns, etc.

21. It is best for teachers to show students how to do a few things well. Neither the teachers nor the students have time to take on many more activities than they have at present. Also, we should not overburden those who put on the contest

22. I think that the contests should be planned for the average boy—that he may get some stimulation rather than having large contests where he just gets his mind filled with a lot of livestock and people milling around. I am in favor of more *area* (county or local) contests organized by a local group of teachers in order to provide incentive for their boys

23. *Please* don't bring back sectional contests. *Reasons:* poor quality material, rings not placable, too much like athletic contests. *Agriculture teachers want to be friends.* Too many people judge our departments on winnings in sectional contests

24. I prefer several local (three- or four-school) contests rather than sectional

25. As a whole, I am in favor of local community activities rather than contests, but feel that contests have been helpful as recreation and interest-getting activities. I doubt if they are as educational as we have thought, and probably do not justify as much time as many teachers give them. This statement applies to all contests as such

26. There are already too many contests! We keep on trying to kid ourselves that contests are teaching devices and make them more complicated. Let's have interschool contests with only two or so schools and do away with the county, sectional, state, national, international, and interplanetary stuff

27. Certificates of award for team (to stay in the school) and for each boy are good motivating influences

28. I think the number of contests should be increased somewhat but not made wide enough for every boy to be included. Only the approximately upper 40 percent of any school group, based on abilities developed, should participate for practical purposes.

Conclusions

The writer prefers not to draw any conclusions for the reader. Those interested in having a complete summary of the survey should write for a copy. The summary gives the number of teachers replying to each item and the percentage that ranked each item 1, 2, 3, or 4 in importance or that answered questions "yes" or "no." It also lists additional objectives proposed as well as additional comments.

[1] A rather complete summary of the survey on Judging Contests as reported in this article is available from 212 Mumford Hall, Urbana, Illinois. Copies will be sent free on request as long as the supply lasts.

[2] In general, the contest as held in the past consisted of four divisions; namely, livestock, dairy, poultry, and grain. Eight rings were included in each division. High teams and individuals were selected in each division; and ribbons, cups, or other trophies were given to the winners.

Contests As Educational Devices

D. M. HALL, College of Agriculture, University of Illinois, Urbana

D. M. Hall

ALL educational methods and devices are not and should not be ends unto themselves. Their only virtue is that they accomplish some purpose. Consequently, no device can be properly evaluated without a full knowledge of the objectives within which the device is to be made operative.

Educational policy commissions generally urge society to accept the responsibility for making:

1. Every person healthy
2. Every person efficient in a vocation
3. Every citizen socially acceptable and civically responsible

Placing classes of Angus breeding cows at a state F.F.A. contest in Missouri

4. Every person interested in some recreational endeavor.

Curriculum builders expect to accomplish these ends by seeing to it that every person is informed, is able to think straight, and is in possession of desirable social attitudes and interests. Thus they expect us to teach facts, to teach people how to think and how to feel.

As contests provide opportunities for learning facts, and for rendering judgments, as they help build interests and attitudes, as they offer incentives for developing manipulative skills, they are acceptable; as they fail in these, they are undesirable.

Rarely does anyone criticize contests on the basis of the facts and manipulative skills involved. Frequently, however, contests are accused of developing undesirable interests and as being guessing rather than judging contests.

Our first job in developing attitudes is to decide which ones are desirable, and we must be careful not to become bogged down by selecting too many. Therefore, we name only four which appear as possible outcomes of contest situations.

1. Dependability or accuracy, and honesty
2. Determination
3. Flexibility or adjustability
4. Social effectiveness or integrative behavior.

In thinking straight we must have facts, but facts of themselves are of little use unless they can be organized into judgments. Among the various mental acts involved in judging, the following seem important in contest situations:

1. Ability to formulate a tentative hypothesis and to withhold final judgment until one has had time to define and classify the data
2. Ability to evaluate each proposed solution
3. Ability to make decisions
4. Ability to report the results of thinking in accurate and effective style.

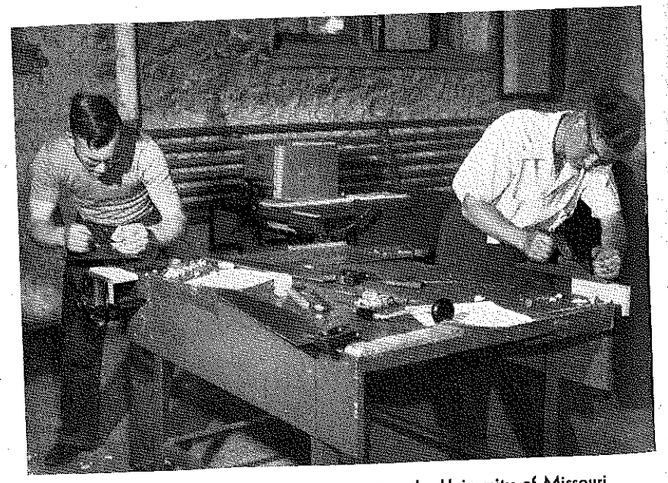
Contests have played an important part in agricultural education. They have attracted attention and won public support for activities. But more recently emphasis has been directed toward their learning value rather than their publicity value. Learning comes thru activity and comes more rapidly if it is conscious activity. Therefore, the first requisite of a contest seems to be:

1. *Each contestant should have full knowledge of the requirements of the contest prior to the date the winners are selected.* No person can be motivated by something unknown to him. He must know of the promised consequences before he will struggle for their attainment. If he expresses his desire to participate early in his period of eligibility, then any determination he generates to achieve will have its base in his own goals and these in turn become the basis for his conscious activity. If we are successful in making superior achievement the incentive, we can expect a contest to teach a boy how to compete against his former record. Then he will be too busy watching his own growth to envy some one else's progress. Contests to determine who has already reached superiority are not incentives.

Success and failure deeply influence a person's activity. Generally after a success the individual sets himself a higher goal, while after a failure his aspirations go down. Thus the second requisite for a contest is:

2. *The possibility of being recognized must be available for a large part of the participants.* The group system of awards is considered by many to be superior to the individual system in motivation. Team, school, club, or county awards are valuable in developing integrative behavior. That a group can work to perfect each other, that they achieve together, is integrative behavior. There is a narrow range in the scale of difficulty above and below which lie tasks we consider not worthwhile. They are "too easy" or "too difficult" to stimulate us. Lewin's experiments show that a person reacts to success or failure within only a small segment of the difficulty scale. Thorndike's studies indicate that many moderate awards frequently given an individual are superior to fewer large awards. Failure to win, tho, is not a catastrophe. According to Thorndike, if a person succeeds in 1 task in 10, he will not lose much in the power to succeed in the occasional task which is within his ability. Some officials conceal the name of contestants who did not win, forgetful of the fact that there is some reward in having been good enough to run with the winners. These officials do not understand the source or value of group integration.

Many contests have been criticized because of the competitive spirit engendered. We question that competition is a primary trait; rather it appears to be an activity thru which we strive to be recognized. We make contests competitive by the way we select and award recognition. We could make them integrative instead.



Contestants in a farm mechanics contest at the University of Missouri
The exercise involved the use of several woodworking tools

It is important that we score what we intend to measure; therefore, we raise the question, "What is being rewarded?" This emphasizes the third requisite for contests, namely:

3. *The manner of selecting winners must be valid, objective, and fair.* If it is a judging contest, the contestants must be required to render judgments, and the scores assigned must show the comparative value of the judgments rendered. Sometimes the test given fails to test a real-life situation. Cows are kept for milk production, but Gowin shows the correlation between body characteristics and production to be only 10 percent better than guessing. In Wisconsin, experienced dairymen were more wrong than students, and the rankings by both were very little different from the rankings obtained by drawing the numbers from a hat.

Generally, there is less difficulty with the tasks assigned than with the scoring system. Hall and Henderson set up a variable scoring system which permits scoring rings of varying degrees of difficulty. More experimental work should be done on the grading schemes.

No doubt many more samples of ability are needed than are usually collected. Lyman states that 20 rings of dairy cows are needed to insure a reasonable degree of reliability.

If the contest aims to honor some outstanding achievement, we must be sure that it actually calls for the expected ability. Many health winners do not know what or why they won. Score cards for selecting honor and outstanding members contain items like the following:

1. Size of project
2. Use of improved practices
3. Efficiency of production
4. Interest shown
5. Quality of finished product.

Evaluation of Contests

These are good points, and we should strive for more objectivity in scoring each. It seems there could and should be added some tests of ability to render judgments. Test constructors, namely, Tyler, Enrich, and Johnson, have done considerable work in devising tests of thinking ability. Frutchey has shown how managerial judgments may be tested in the sheep and garden projects. Leadership is frequently mentioned on contest score cards, but no satisfactory analysis of leadership has yet been made. When we examine the things that a group demands in its behalf, we find at least three different opportunities for leadership. There seems to be different kinds of leadership, but most score cards recognize only the "spokesman" type.

In order to evaluate a contest, let us begin by scoring it on the following points:

1. Motivation
   Every member made fully aware of the requirements of the contest and given an opportunity to enroll at the beginning of his period of eligibility as a contestant. . . . . .
   Many moderate awards provided so that a reasonable percent of the enrollees may achieve recognition. . . .
   Rules such that members must put forth extra effort to achieve recognition. . . . . .
   Actual true-to-life situations provided as problems to solve in order to win. . . . . .
2. Objectivity
   The scoring technics must measure what is intended to be measured. All scoring must revolve about the objectives of the contest.
   An adequate sample of the facts to be learned must be taken. . . . . .
   Tests of the contestants ability to render judgments must be made.
   Objective tests of personality traits must be provided if personality is to be considered. . . . . .
   Tests of skills to be acquired must be made. . . . . .
3. Promotional
   The contest should promote wider interest in agricultural education without exploiting the contestants.

Reorientation of Judging Contests

W. HOWARD MARTIN, Teacher Education, University of Connecticut, Storrs

W. Howard Martin

A CRITICAL appraisal of judging contests is desirable at this time. Contests were generally curtailed during the war years. Pressure for their reinstatement is considerable. Teachers, supervisors, and teacher-trainers are asking questions like the following: Are contests desirable? On what basis are judging contests justified? How can judging contests contribute to vocational objectives of education in agriculture? What principles should guide the development of postwar judging contests? Full agreement on the subject can hardly be expected, but a critical attitude is to be commended.

Should Contests Be Stressed?

Competition (contests) is a feature of a capitalistic economy, and cooperation is an essential factor in democratic social control. Public education has given emphasis to both competition and cooperation. Competition, it is believed, has been given the greater degree of emphasis. The system of marks and the place of extrinsic awards in secondary education support this contention.

The desire of the adolescent boy to compete, to excel, and to display special talents for the approval of his fellows is a recognized force in education. Contests of whatever nature make capital of that force. Contests should be definitely recognized, however, as a means, not an end. The development of specific skills, abilities, attitudes, or ideals are the desired ends. The use of contests as a means, therefore, should be determined by their effectiveness in attaining specific objectives.

All contests are likely to be restrictive in character. Competition in state and national vocational contests is open to a selected few. All may profit from participation in local and district "instructional contests" but seldom if ever, will all be in at the "grand finale." If the term "Public Education" has significance, educational activities should be organized in terms of the many rather than the few.

Cooperative events involving the participation of all members of the group at appropriate levels of ability appear to be more in keeping with democratic principles than do contests. Marketing days —market shows—and cooperative purchasing afford opportunities for teaching many of the elements which are supposedly inherent in judging contests.

Contributions to Vocational Objectives

Any activity long continued in the program of vocational agriculture should contribute to progressive establishment of learners in farming. It is a proved fact that state contests influence the character of the local program in vocational agriculture. The relative proportion of the time, travel, and field trips primarily used in preparation for contests is considerable. Have those efforts resulted in a proportionate contribution to establishment in farming of learners?

Judging contests, all too often, have consisted largely of placing prize college animals in order, scoring milk, or other activities requiring few, if any, of the skills and judgment abilities essential to success in farming. Most vocational contests trace, in their family tree, to show rings and fairs in which the primary objective was improvement of stock and crops. In consequence, preparation for contests has consisted in teaching not only the standards of product, but also the whims and fancies of particular judges.

Origin in Needs of Learners

Judging contests for vocational agriculture should find origin in the needs of the learners. They must have a basis in the judgment abilities essential to progressive establishment of farmers generally and for farmers dealing with specific enterprises. The judgment abilities needed are many and varied. But judgment in life situations is highly individual—highly specific in terms of conditions, so much so, indeed, that what would be wisely selected as a herd sire, as a farm team, etc., by one farmer might rightly be rejected as unsatisfactory by another. Some ability to appraise conformation, identify blemishes, or read pedigrees was required in reaching the different judgments. However, the ability to decide wisely in terms of specific situations is pivoted to success in farming. The development of judgment abilities must, therefore, go beyond that of making weighted comparisons to recognized standards. To make intelligent choices would require, in addition, a knowledge and use of pertinent facts. A farmer selects a herd sire or foundation animal with reference to breeding and production and with an intimate knowledge of needs. Judging contests can never be a means to the full realization of vocational objectives in teaching judgment abilities. A frank recognition of deficiencies, tho, may result in devising contests which will be more appropriate to purposes of education for establishment in farming. Such recognition can also strengthen teaching preparatory to contests even tho the contests be poorly adapted.

(Continued on page 213)

Suggested Activities in Livestock Selection for Group Instruction and Contests

G. P. DEYOE, Teacher Education, Michigan State College, East Lansing

"WE MOVE in new directions!" "Or, do we?" In many respects in our work in vocational agriculture, we can point with justifiable pride to indications of our willingness to accept new developments and procedures. However, in some phases, the progress is less evident. This is especially true of much of our emphasis in the field of livestock selection.

G. P. Deyoe

The writer has before him a copy of a book which is one of the first published texts on livestock judging. This book, *Judging Live Stock*, by John A. Craig, was published in 1901. While the "styles" in the types of animals as portrayed by the illustrations, together with the emphasis on score cards, would tend to "date" this book, most of our instruction in livestock selection is still based on "judging" animals by outward appearances, which is the primary emphasis in this book written nearly 50 years ago. In the meantime, science and practice in livestock selection have demonstrated that this approach is very inadequate because it fails to take into account the factors of greatest economic importance, such as performance and transmitting ability of the animals. The writer has elsewhere elaborated on the implications of recent scientific developments for our instruction in livestock selection.[1]

State and national judging contests are an important part of this picture, since they influence the pattern for instructional activities in many local departments of vocational agriculture. If we feel we must have such contests (and this seems to be the case), these activities should be brought into line with defensible educational objectives. As an encouraging feature, several instances are available which show that substantial majorities of teachers, supervisors, and teacher-trainers want our state and national contests changed so that these activities will be sound educationally. *In livestock contests, this can be interpreted as meaning that we must change the nature of these events* so they will measure the kinds of abilities needed to select animals in accordance with modern scientific developments.[2]

Some Constructive Suggestions

"What shall we do about the situation?" That's the $64 question. With the idea of being constructive in this matter, the following list of activites is presented.[3] *No claim is made that this list is complete or that the activities cannot be improved.* It should be obvious, however, that these come closer to involving the desired abilities than the traditional contests in which external appearances of the animals constitute the sole basis for placing the classes. Several of these activities, or activities closely similar, have been used by teachers and others in instruction in livestock selection. Some have been used in contests. In all cases tried, the teachers have indicated their strong approval.

These kinds of activities have a definite place in our instructional program if we are to develop the abilities needed for true-to-life situations. Furthermore, they must be given consideration in our various contests if we recognize our responsibilities as educators. If we move in these directions, we have some hope that there will be a narrowing of the gap between our instructional activities in this important field and the best that science has to offer.

As indicated in some of the activities, the animals might be "rated" (or classified) into A, B, C groups instead of being "placed" (or ranked) in the conventional manner.

Suggested Activities

A. Dairy Cattle:

1. Class of cows with information on production. With approximately a "50-50" weighting of type and production, place these cows according to their value for a purebred breeding herd.

2. Class of cows with information provided on production each year, stage of lactation, age, and calving history of each cow. On the basis of this information, along with consideration of type, place these animals in the order of their value as foundation cows. (In such a class as this, the animals might be rated into A, B, C groups instead of placing in numerical order.)

3. Class of heifers with dams available for inspection. Provide age of heifers. Provide information for dams as in item number 1 (above) and on sisters and half sisters of heifers. Place them in order of their value as foundation animals.

4. Class of bulls with pedigree information (some "padded"), as well as information on production and type of their offspring. Also, provide data on production of dams so that figures are available for "proving" the bulls. Place bulls in order of probable value for improving production in a herd.

5. Get-of-sire groups for at least four sires, with information on production of their daughters and records of dams of these daughters. Place these groups in order of the value of the sires to the herd.

B. Swine:

1. Class of gilts with date of farrow and information about each litter, including 56-day litter weights, number farrowed, number raised, etc., as well as pedigree of each showing P. R. information. Place in order of value as foundation animals.

2. Class of young boars with information as above. Place similarly.

3. Class of mature sows with data on the litters from which they came (similar to above), as well as data on litters they have raised. Place in order of value as foundation sows.

4. Class of "tried" boars with data on litters from which they came, as well as on litters sired. Place in order of value for use as sire.

5. A group of market hogs in various stages of finish. Identify market grade of each.

6. Several gilts with one or more litter mates of each, 56-day information on entire litter, date of farrow, etc. Place gilts in order of value as foundation animals.

7. Several get-of-sire groups with age and other information for each animal. Place these in order of breeding value of boars.

8. Similar class for produce-of-dam.

(Continued on page 209)

[1]Deyoe, G. P., "Keeping Pace With Science in Instruction in Livestock Selection," *Agricultural Education Magazine*, Vol. 9, No. 8, Feb. 1937, p. 117.
....., "Antiquated vs. Modern Procedures in Livestock Selection," *Agricultural Education Magazine*, Vol. 12, No. 2, Aug. 1939, p. 23.
....., "If not Judging, What Then?," *Agricultural Education Magazine*, Vol. 14, No. 2, Aug. 1941, pp. 28-29.
Peters, W. H., and Deyoe, G. P., *Raising Livestock*, Chapters 2 and 7, McGraw-Hill, New York, 1946.

[2]For a teacher's viewpoint, see Jenson, E. C., "Win, Place, or Show," *Agricultural Education Magazine*, Vol. 19, No. 7, Jan. 1947, p. 123.

[3]The writer acknowledges the assistance of supervisors and teacher-trainers in agricultural education in Michigan for suggestions in compiling these activities.

Students culling ewes from a breeding flock and selecting ewe lambs for replacements by studying the dams and their offspring. In addition to the usual considerations of type, they are considering performance data in terms of pounds of lamb produced per ewe and weights of fleeces. They are also considering evidences of prepotency for desired characteristics

BILL OLIVER, Teacher, Kerrville, Texas

MUCH has been said and written during the past few years about the advisability of reinstating judging contests into the program of vocational agriculture following the end of the war. Everything that has been said, both for and against the holding of contests, has had good logical basis. We will all agree that such contests stimulate interest on the part of the student in livestock enterprizes and certainly have broadening social and educational influences on the student over and above the ability to judge livestock. On the other hand, there is some question that show-ring score cards used as the basis for judging in the contests actually indicate the most profitable animals under farm and ranch conditions. There can also be some question as to the actual contribution that such contests make toward establishing boys in agriculture and their success or failure after becoming established.

With these facts and questions in mind, the teachers of vocational agriculture in the hill country district of Texas did some thinking during the latter war years and came up with a couple of contests, adapted to that section of the country, that they feel are practical contests which get the results right down on the level with the average rancher. This district of Texas is principally a ranching section where sheep and goats are the major sources of income. The two contests held in this district are sheep judging and goat judging.

Goat and Sheep Contests

The goat-judging contest was the first to be held, and it was planned and put on by R. R. Tippit, who teaches at Comfort, Texas. In putting on the contest he had the help and cooperation of the Comfort Wool and Mohair Pool which is headed by Mr. Adolph Steiler, one of the leading goat raisers of Texas. This contest was based on the principle that goat raisers should keep goats that shear a large number of pounds of mohair and that the quality of the mohair be such that would demand highest prices. One of the big problems with which agricultural workers in the goat country have been faced is that of getting the raisers sold on producing high-quality hair. We are trying to get the raisers to keep goats that shear heavy fleeces that are of high quality. Growers usually are interested in keeping heavy shearers but are not interested in the quality of the hair that they produce.

In the contest, a five-man team from each of the schools in the district placed two classes of goats. Each class was placed twice. One placing was made in the order of the shearing weight of the animals with the heaviest fleece first and the lightest fleece last. A second placing was made with the dollars-and-cents value of the fleece on the mill-sort basis with the most valuable fleece first and the least valuable last. Of course, this second placing included both the quality of the hair in the fleece and the weight of the fleece. The manner in which the official placings for the contest were determined is the practical basis for this contest. In order to determine the official placings of the classes on shearing weight, the goats were actually sheared in the presence of all contestants and the fleeces were weighed. In this manner the goat that put the most hair on the scales stood first in the class.

The determination of the official placings for the value of the fleeces was a little more difficult but equally as practical. Men employed by the Comfort Wool and Mohair Pool took the fleeces individually and separated each into the various mill sorts, weighed each individual sort within each fleece, and figured the value of each sort at the actual market price for that sort. By adding together the total value of each sort within each fleece, the total value of the fleece was obtained. Of course, the sorts are made on the basis of the finest of the individual fibers of hair with the finest hair bringing the highest price and the coarsest hair bringing the lowest price. Thus the goat which actually sheared the largest number of dollars and cents at market value stood at the top of the class in this placing. The men doing the sorting were experienced mill sorters, and they did their work in the presence of the boys, thus further adding to the educational value of the contest. This contest and the training which preceeded it proved very valuable in working with boys whose supervised farming programs included goats.

A similar contest was held in the district in sheep judging. The sheep contest was put on by Dean Hopf, who teaches at Harper, Texas, and he was assisted by the Harper Lions Club. The basis of the sheep contest was that the best sheep should be the sheep that sheared the largest number of pounds of wool on a scored basis. Again two classes of sheep were placed. One placing was made on each class on shearing weight of the animals. The second placing was made on each class on the dollars-and-cents value of the fleece on a clean basis. Of course, the clean basis is actually the way the wool is marketed. In making the placings on the value of the fleece, the students had to take into consideration both the shearing weight and the shrinkage, or the amount of grease, of the fleece.

Fleeces Clipped and Graded Animals Were Placed

The official placings were again determined in a very practical manner. The sheep were sheared and their fleece weighed in order to determine the placing on shearing weight. In determining the official placings of the classes on value of the fleece, Mr. Jim Gray, professor of sheep husbandry, of Texas A. & M. College, acted in the capacity of appraiser on the same basis as the appraisers who set the value on all wool sold to the Commodity Credit Corporation. He estimated the shrinkage of each fleece and figured the actual market value of the fleece on the basis of the actual number of pounds of clean wool in the fleece and the actual market value of that wool.

Neither of these contests took into consideration body conformation, breed character, and other points found on the show-ring score card for sheep and goats. The contests *did*, however, direct the attention of the students toward the product marketed from the animals and between individual animals and its importance. It has always been easier to get over the importance of body conformation to students than it has to get the differences in fleeces over.

The students were much more satisfied with the outcome of the contests over the old type because they knew and saw that the official placings were real and not just someone's opinion. Actually, this last point is the meat of contests. The teachers in the hill country district are going to continue to hold these contests on a district basis and have recommended their adoption for state contests. They are sold on the value of such contests as real aids in teaching boys to become better ranchers. It is possible to make other contests equally as practical with a little more trouble and effort. The teachers in the hill country district of Texas are in favor of setting up such practical contests from the national level down.

Livestock Selection

(Continued from page 208)

9. Group of 8 to 10 gilts with information as in number 1. Classify these animals into A, B, C groups according to merit as breeding animals.

C. Beef Cattle:

1. Class of breeding cows with information on age of each, number of calves dropped by each, and weight of calf at 6 months. Rank in order of value as foundation cows.

2. Several heifers with dam of each available. Age of heifers given. Place heifers in order of value as prospective breeding animals.

3. Similar class for young bulls.

4. Get-of-sire groups with age and other information for each animal. Place these in order of breeding value of bulls.

5. Similar class for produce-of-dam.

6. A group of feeder steers. Identify the market grade of each.

7. A group of steers with various degrees of finish. Identify the market grade of each.

8. A group of feeder steers of various degrees of quality, for possible purchase. Purchase price of each is given, together with present feed prices. Rank in order of probable profit if purchased and fed out.

9. Group of six to eight heifers with information as in number 2. Group these animals into A, B, and C groups according to merit as breeding animals.

D. Sheep:

1. Class of mature ewes with information on fleece weight, pounds of lamb per ewe at 120 or 135 days. Place these in order of value as foundation animals.

2. A class of ewe lambs with information on age of each, whether twin or single, and weight at 120 or 135 days. Place in order of value as breeding animals.

3. Similar class for young rams.

4. Group of market lambs. Identify each as to market grade.

5. Get-of-sire groups for each of four or more rams. Place these on basis of breeding value of rams.

6. Similar class for produce-of-dams.

7. Group of 8 to 10 mature ewes with information as in number 1. Classify into A, B, C groups according to merit for keeping in the breeding flock.

Methods and Materials

G. P. DEYOE

Directing Students in Preparing Team Demonstrations in Agriculture

H. M. BYRAM, Teacher Education, Michigan State College, East Lansing

H. M. Byram

STUDENTS will learn by teaching others. By giving a demonstration, students learn to understand approved practices in farming. They learn to organize agricultural information, to present it in an effective manner, and to think "on their feet." For this reason the preparation and presentation of demonstrations should not be limited to a few, selected boys but should involve all boys who can profit from this experience.

The use of demonstrations is an effective way in which to teach adults and others in the community and in the school the values of approved practices for the farm and home. Desirable changes in farming efficiency and in rural living can be brought about thru demonstrations which "show" as well as "tell."

The practice of using teams of boys to present demonstrations to groups in the school and community is a splendid device for public relations. It acquaints the school and the community with the work of the department of vocational agriculture and, if the demonstrations are well done, it reflects credit upon the F.F.A. members and the department.

Selecting the Subject

In selecting a demonstration, the importance of the subject in the local community should receive first consideration. A demonstration on controlling soil erosion will be much more effective in a community where erosion is a problem than a demonstration on fitting and showing a dairy calf. The demonstration should deal with changes which are needed in farming practice or farm living. It should not be limited to manipulative jobs. Many managerial jobs can be demonstrated very effectively, such as selection of feeds, planning a crop rotation, and control of internal parasites in hogs or sheep.

Of course, it is a decided advantage to select a subject which pupils can *show* as well as *tell* about. Most boys enjoy giving a demonstration of this type, too.

It is important to select a topic that is narrow enough in scope to permit thoro treatment. A demonstration that does a good job of teaching a few important things well is better than one which treats a broad subject only superficially.

Preparing the Demonstration

The first step in preparing a demonstration is that of organizing the subject matter. Pupils should study and discuss the subject matter concerned, and understand it so well that they can satisfactorily answer questions concerning it. If boys are really "full of their subject" it will be easy for them to show and tell others what they know and are able to do. It is usually desirable to put into writing what will be said by team members as well as what they will do.

After the subject matter is organized, the materials should be made or otherwise obtained which are to be used for visualizing purposes. These should be the actual articles where possible, rather than models, except in cases where room does not permit use of actual article. For instance, if quality of hay is being discussed, several samples of hay representing different grades should be used. A full-size milk pail is better than a miniature. Use may well be made of models, enlarged pictures, photographs, paintings, projected pictures, maps, diagrams, graphs, or charts, depending upon the subject and the purpose. Nothing should be used which cannot clearly be seen or identified at a distance of at least 50 feet.

There frequently is a tendency to place too many words on a chart for the audience to read at one time. Words printed on charts should be carefully chosen, and no more should be used than necessary to express the thought.

If the demonstration is to be presented before a large number of different groups in the community, it is desirable to obtain or construct a kit, trunk, or some type of carrying case. This case should provide space where all materials to be used can be packed in or stored so they will not deteriorate, become broken or torn, or otherwise become unfit for use.

Presenting the Demonstration

Most good demonstrations include an introduction by one team member of himself and his colleague and the subject to be demonstrated. This should be done quickly and the audience properly prepared for listening and seeing.

Some demonstrators make the mistake of talking too long at one time. Others make an equally serious mistake of continually changing the talking from one member to another. There should be some logical reason for shift of speaking from one member to another, such as change in subtopic, or in activity being performed. There is no rule of thumb to go by, but in a 20-minute demonstration it would seem that each speaker should speak at least two different times and probably not more than four.

It is very important to co-ordinate the work of the two team members. Some teams do this by setting up a double-column plan in writing, one column for each member. An illustration of this method is given below in excerpts taken from a plan.

If there is an activity that takes considerable time to perform, such as centrifuging some milk-test bottles, running a sample of grain thru a fanning mill, or operating a milking machine on a cow, it is important to organize carefully the speech of the other member, so that the attention of the audience is held. A demonstration in which nothing happens or is said for half a minute has already lost the attention of the audience.

It is important to avoid undue noise or activity on the part of one member while the other is speaking. It should not be necessary for the speaker to shout. However, good demonstration team members learn to speak clearly and distinctly so as to be heard by an audience up to several hundred persons.

Avoiding Distractions

If ingenuity is exercised, the team member who is not speaking at any given time will have plenty to do. He can put up and take down a chart. He can point to the words of other parts of a chart being referred to by his teammate. One device that has been used is to build up a chart by placing on an easel, one at a time, words or phrases on strips of cardboard.

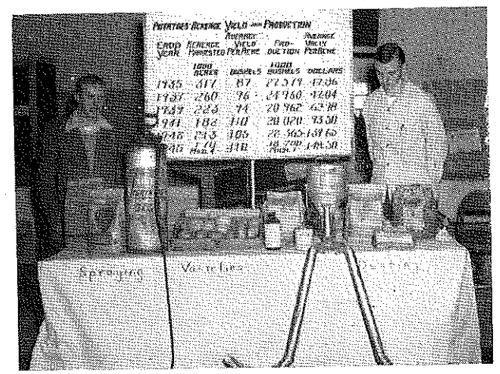
Since the attention of the audience should be focused upon one thing at a time, a chart or model or other materials should not be placed in a prominent position where it can be seen until the speaker refers to it. When the speaker has finished referring to an object, picture or chart it should be removed to help focus attention on the next thing being discussed.

Evaluation of Demonstrations

Demonstrations should be presented to a class in agriculture or to other school groups or the F.F.A. chapter for evaluation. The group should ask questions of the demonstrators to help them determine if they have authoritative information. The members of the class or the F.F.A., the teacher of agriculture, and other staff members may give valuable suggestions. A demonstration that is well done and which deals with important problems of the community should be given to many groups in the community, including large audiences.

The following questions may be used in evaluating the demonstration and in improving it:

1. Does the demonstration deal with something important on the farms or farm homes of this community?
2. Does the demonstration actually teach? What have I learned?
3. Do the team members use authentic, reliable information and approved practices?
4. Does the demonstration hold the attention and interest of the audience?
5. Do the members of the team work well together?
6. Does the demonstration reflect credit on the school and the F.F.A.?



A team demonstrating approved practices in potato production at the state F.F.A. Potato Marketing Day at Greenville, Michigan. The demonstration has been given before many groups

Two members of the Coldwater, Michigan, F.F.A. demonstrate how to avoid losses in marketing livestock at the annual state F.F.A. Fat Stock Sale and School

Dairy Demonstration

Ed Jones — Bob Greene

(Part 2—Pipetting and adding acid to milk)

"The milk is measured with this piece of shaped, glass tubing which is called a pipette. It has an etched mark on it which indicates the level to be reached by the milk in the tube so as to equal 17.6 c.c. In order to get the milk into the tube, etc., etc."

—Hold up pipette
—Point to 17.6 c.c. mark
—Place pipette in milk and draw

(Part 3—Centrifuging)

—Shut cover on centrifuge

—Start turning centrifuge

—Continue turning

"After the test bottles are placed in the centrifuge, it is necessary to run the centrifuge for five minutes. The purpose of this fast, rotating motion is to separate the fat globules from the other materials in the test bottle. This takes about 15 pounds of centrifugal force. The other materials left in the milk are casein, etc., etc."

F.F.A. members from Grand Blanc, Michigan, at the close of a demonstration which they gave on approved practices in raising dairy calves. The "wrong" steps at the left and the "right" steps at the right were built up by inserting each card, one at a time as the practice was brought out. Each of the charts in the background was displayed only during the time it was being discussed

The Demonstration As a Method of Teaching Vocational Agriculture

E. F. McCauliff, Teacher, Cuba, New York

E. F. McCauliff

DO WE, as teachers of agriculture, make full use of the methods available in presenting subject matter to our pupils? Too often we overlook the greatest opportunities at our disposal. We are somewhat loath to accept these opportunities and fail to present our subject matter in a form that is appealing, interesting, and enlightening, thereby, failing to achieve our aims and objectives.

To the teacher of agriculture, the demonstration presents one of the most efficient teaching devices at his disposal. It is efficient in that, by its own nature, it presents its subject by three processes. It provides learning thru hearing, seeing, and doing. It is a presentation based on the three major learning processes of the individual.

4-H clubs have long recognized the value of this method of teaching farm youth. Vocational agriculture has failed to capitalize on the opportunities it has to offer.

Outgrowth of Class Study

The demonstration should not be developed, as such, in itself. It should be the outgrowth of the job. It may include all or part of the job, depending on its appropriateness. The job, to be taught, should be selected on the basis of its interest, importance, and timeliness. From this the demonstration may be developed.

In selecting the demonstration, the most important part of the job should be selected. It should be confined to the simple and most common skills. It should be within the knowledge and ability of the demonstrator. A good demonstration should aim to cover a definite job or phase of a particular job.

After the demonstration has been selected, it should be developed by the class. This provides group activity, with each member making a definite contribution to the finished project. By assigning specific responsibilities to individuals or groups in the preparation of charts, models, and script, a sense of pride and the spirit of cooperation is developed in the individual and among the group.

In preparing the demonstration, it is important that the individuals know both the aim and subject to be covered by the demonstration. He should use simple terms and simple language and co-ordinate the action in the demonstration with the explanation. The latter can be achieved only be being familiar with the mechanics of the demonstration. Only improved practices should be used.

It is highly important that the materials be organized in the order of presentation. This necessitates the proper arrangement of materials and script to pre-

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Facts About the Business Side of Farming

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Facts and figures about the economic or business side of farming are among the most useful tools for a teacher of vocational agriculture. They show the payoff for all the practices which produce more eggs per hen, more corn per acre, or more meat per steer. For instance, if you are explaining the value of hybrid corn, you can say that in 1932 when hybrid corn was still an experiment, Iowa cornfields averaged 43 bushels to the acre; while in 1946, when virtually all Iowa corn acreage was planted with hybrid seed, yields averaged 60 bushels to the acre. Then you can show that 26 percent of this increase was due to the use of hybrids and other factors accounted for the rest. To drive your point home, you may bring in some figures on cash receipts from farm marketings, the average income of farmers, and perhaps some facts about the costs of production and the man-hours of work involved. You may even want to include some discussion of the outlook for particular crops and livestock during the coming year.

B.A.E. a Service and Research Agency

To obtain such data you have the resources of American agriculture's economic fact-finding and research agency, the Bureau of Agricultural Economics, best known as B.A.E. Thru its crop-reporting service, B.A.E. collects information every month from representative farmers thruout the country. The facts thus reported, about a cross section of individual farms or communities, are combined into statistics which can be applied to your county or your state or the country as a whole. The plain facts on crops, livestock, and prices are published in over 400 reports each year.

Furthermore, B.A.E.'s research staff and economists of the state colleges are constantly making analyses and interpretations of economic conditions affecting agriculture. This research gives farmers and the public a continuous interpretation of the known facts about farm production, farm business, and farm people. It also tries to show how factors beyond farmers' control may influence agricultural prosperity. The fields of economic research include demand for farm products, land values and tenure, rural population, prices, income, labor, marketing and transportation, farm management, costs of production, and the financial condition of agriculture.

Most teachers of agriculture are familiar with government crop reports and with some of the interpretive reports issued by state college economists and B.A.E. One of the most useful in the latter group is the easy-to-read monthly bulletin called the "Agricultural Situation." In brief statements and common language it tells the significance of current economic trends in agriculture. Besides this monthly, there is also a series of periodical "situation reports" covering all important agricultural products, demand and prices, farm income, marketing and transportation, farm costs and the national food picture.

Key man for all this information in each state is the state agricultural statistician. He collects the facts by mail from a corps of voluntary crop reporters and others, and supervises crews of interviewers who collect information directly from farmers in sample areas thruout the state.

Recruiting younger crop reporters is one of the greatest problems in maintaining the widely used reservoir of agricultural statistics. The end of the war found many crop reporters close to the retiring age, with no successors in prospect. Whatever agriculture teachers can do to interest "the younger generation" in crop reporting will benefit all farmers. For good crop reporters are the backbone of the system wherein farm people exchange reports about their own farms and communities for reports about the same conditions thruout the state and the nation.

Crop-Reporting Service

Many teachers have found that classroom practice in filling out crop-reporter questionnaires is an excellent way to develop pupils' awareness of what goes on on the farm. It also frequently develops the kind of interest which makes a pupil a good crop reporter when he goes into farming for himself. These questionnaires, as well as state crop reports and other information, can usually be obtained from the state agricultural statistician.

Teachers of vocational agriculture come in contact with the crop-reporting service two ways. (1) They are close to the farm people who supply the basic data for all official estimates of agricultural production and prices, and for reports on farm business and farm people. (2) They are in a position to help farmers, prospective farmers, and people who do business with farmers in making full use of the economic information available.

It doesn't take an economist or a statistician to interpret the dollars-and-cents facts shown in such statistics as farm income, land values, or agricultural production. Any farmer can match the figures for his own farm against current averages and trends for the county or the state. For the community as a whole, teachers and other community leaders can hold up the yardstick of over-all statistics to stimulate economic progress.

The average high-school student is not likely to be interested in pure statistics unless they are applied to situations he knows—such as his own farm or his own community. However, many returning veterans, interested in settling on new farms, or entering new farming ventures, have shown considerable interest in the figures which reflect experience of others.

To make the best use of statistics, it is well to understand how they are collected and computed. National crop reports, for example, are based on monthly questionnaires answered by volunteer crop reporters and mailed to the agricultural statistician for each state. The state statisticians handle these questionnaires as confidential information, and cannot release state figures until the national crop report is issued by the Crop Reporting Board in Washington. The Crop Reporting Board's estimates for the entire country and for each state are based on the state statisticians' compilation of farmers' own statements. They are checked against data furnished by railroads, processing plants, and others handling farm products, whose operations are a measure of farm production. There are also complete farm-census enumerations made annually in some states by county tax assessors. The national census of agriculture is taken every five years. These census data are the foundation, or bench mark, for all such estimates as farm production, acreages, livestock numbers, and numbers of people living and working on farms.

The agricultural statistics published by the Bureau of Agricultural Economics are obtained in two ways: (1) by direct inquiry—thru questionnaires and interviews; (2) by combination and comparison with other information in computations and calculations.

The distinction may be clearer from an illustration. Crop acreages for the nation, states, or areas within states are estimated directly from acreages reported by a cross section of farmers. But determining a figure like the available feed supply per unit of livestock requires several steps. First, acreages and yields of all feed crops as reported by farmers must be combined to indicate total feed production. Then reports of the total number of chickens, cows, horses, mules, sheep, and hogs must be converted to a unit basis. Finally, the amount of feed available must be divided by the number of livestock units to show how much feed is available for each livestock unit. This process of determining the amount of feed available per livestock unit illustrates how reports of farmers in answer to a few questions may be used to measure other facts not reported.

Statistical Information

Types of statistical information which are now obtained by direct inquiry, mostly by mail, are summarized below:

a. Crop acreages (108 crops)
b. Conditions of crops and pasture; yields per acre and production (136 crops)
c. Stocks of products on and off farms
d. Numbers of livestock and poultry on farms; livestock feeding operations; livestock raised; volume of dairy, poultry, livestock products
e. Crop planting and livestock breeding intentions
f. Farm disposition of crops and livestock
g. Processors' operations
h. Prices which farmers receive for their products, and which they pay for the things they buy
i. Farm wage rates
j. Farm employment
k. Interest and tax payments
l. Farm machinery information
m. Land values
n. Farm population and movements to and from farms.

The types of statistics which B.A.E. computes from these groups include: supply and disposition of agricultural products; cash receipts and gross farm income; farm-production expenses; net farm income; financial condition of agriculture; retail value, farm value, and marketing margins of food products produced by farmers; total and per capita consumption of food products produced by farmers; feed supplies per animal unit; consumption of feedstuffs by various classes of livestock.

To make these data easier to interpret and use, various statistical measuring sticks have been developed. These include index numbers of prices paid and received by farmers, of farm real-estate values, volume of production and farm output. They also include parity prices and livestock-feed price ratios. These measuring sticks show in brief form the gist of the meaning in many different groups of statistical series.

Index of Prices

For instance, the index of prices paid by farmers shows in one figure the present level of prices compared with a base period for 186 different commodities bought by farmers, plus interest and taxes. The index of prices received by farmers shows in one figure the level of prices received for 165 commodities produced and sold by farmers, also compared with a base period. When the index of prices received is divided by the index of prices paid, the resulting single figure, known as the parity ratio, shows how much farmers' products are worth in terms of purchasing power.

A series of quarterly surveys, in which a cross section of farmers thruout the nation is interviewed, began in January of this year. About 1 farmer out of every 375 was interviewed on such subjects as farm accidents, land prices, income (both farm and nonfarm) and expenses of farmers and farm families, inventories of crops and livestock, farm wages, and the number of people working on farms. This type of interview survey is expected to make a great improvement in the statistical service available to rural people.

Incidentally, the expanding need for statistics about American agriculture makes the field a promising vocational prospect. Agricultural statisticians have to have a sound background of practical farming knowledge combined with the kind of training usually given in any agricultural college course. Positions are filled by candidates who have passed an appropriate civil service examination such as "agricultural statistician" or "agricultural economist." Part-time interview work is also frequently offered to rural people in connection with surveys conducted under the supervision of the state agricultural statistician.

Both teachers and pupils can share in, and profit from, the system which provides factual information about farm production, farm business, and farm people. By helping make the facts known, and by using the facts themselves, rural people take the first steps toward firmly based agricultural prosperity.

M. Z. Hendren has been appointed assistant state supervisor of vocational agriculture in Iowa. Mr. Hendren had served as a teacher of vocational agriculture in the state for several years and is the current president of the state agricultural teachers association.

C. V. Roderick has been appointed professor of agricultural education at the University of Missouri. Mr. Roderick had previously been a district supervisor in the Missouri department of education.

The Michigan Purebred Sheep Breeders' Association allowed a 10 percent discount to F.F.A. purchasers at the Associations' annual bred ewe sale held recently.

Demonstration Method

(Continued from page 211)

vent discord in the orderly presentation.

The length of the demonstration will depend somewhat on the subject matter to be covered. No definite time allotment can be established. Most demonstrations should not exceed 20 minutes in length. It is well to keep the time element under 20 minutes, rather than lose the interest of the audience and the aim of the demonstration.

After the demonstration has been developed, the necessary skills should be practiced by the group. Naturally, some students will become more proficient in manipulating the skills than others. Those acquiring the greatest proficiency should not, necessarily, be the ones selected for the presentation. The greatest good will come to the less proficient students. This is the individual that needs the opportunity the most.

It is wise to provide opportunity for as many individuals as possible to help present the demonstration. One should not miss the opportunity of presenting the demonstration before widely diversified groups. These opportunities may be found before other classes—in high school assemblies, at farm meetings, and in F.F.A. competition.

Presented to Many Groups

Presentation is the important part of a good demonstration. It should be impressed upon the individual that he is a part of the demonstration and that the success of the demonstration will depend upon him and his presentation. Have the demonstrator dress neatly, comfortably, and in accordance with the occasion.

One should be sure that all materials are conveniently arranged before starting. A mistake, often made, is that of obstructing the view of the audience with materials to be used in the demonstration.

It is well to start the demonstration by having the demonstrator introduce himself, tell what he is about to demonstrate and why he thinks it is important. This should be done, only, after the demonstrator has secured the attention of the audience and should be spoken in a soft, low, pleasant voice. Talk to the audience, not at them. Look at the audience, not at vacant space. A smile will go a long way.

The demonstration should conclude with a summary of the main points of the demonstration. Remind the audience of what you started out to do. By so doing, you will instill in the minds of the audience the aim of your demonstration.

It is highly desirable to invite questions at the close of the demonstration. Should questions arise that cannot be answered, the audience should be referred to a reliable source of information.

The demonstration is a teaching device for both the demonstrator and his audience, but more than that, it is a teaching method that the teacher of agriculture can employ in his classroom. By using the demonstration as a group project, he can provide group participation and motivate his work. He can present subject matter and at the same time develop manipulative skills. He provides opportunity for expression and develops in the individual the ability to express himself in terms of his own experiences.

C. E. Wright Appointed to A.V.A. Staff

C. E. Wright

THE American Vocational Association announces the appointment of Dr. Carlton E. Wright as Director of Research and Publications.

Doctor Wright's appointment was made on the joint recommendation of the American Vocational Association Executive Committee and the Committee on Research and Publications. He will work as an assistant to Executive Secretary L. H. Dennis, having as his major responsibility the development of the functions of research and publication of the American Vocational Association. He began his work in the Washington office on February 1, 1947.

Prior to coming to the American Vocational Association, Doctor Wright was director of the New York State Institute of Agriculture and Home Economics at Cobleskill, New York. A native of Vermont, and a graduate of the University of Vermont, College of Agriculture, he took his masters and Ph.D. degrees at Cornell University. He has worked as a teacher, a teacher-trainer, and as an administrator in the field of vocational education with experience in Vermont, New Hampshire, and New York.

Reorientation of Contests

(Continued from page 207)

A careful replanning of activities to include or replace judging contests is in order. Foundations for the reorganization have been indicated in the preceding section of the article. Concrete proposals follow:

1. Contests should be designed to provide for the participation of all students in sections according to grade levels.
2. Contests should be organized around types of farming and participation therein.
3. Contests should be limited to groups of not over 200 students.
4. Contests should be combined with, or in some cases replaced by, marketing days, marketing tours, etc.
5. Contests should be organized so as to provide access to all pertinent facts commonly used in life situations.
6. The claims for other values in judging contests should be recognized. Publicity, good will, widening the boys' horizons and other values no doubt have been secured thru judging contests. Often it may be difficult to secure equivalent results thru other means. More emphasis to chapter tours, and state F.F.A. meetings, along with the gradual development of contests as specified to serve the needs of vocational students can help in these matters. Particular attention can be given to securing assistance of representatives of breed associations, the college, farmers in special fields, and others in replanning contest activities.

Farm Mechanics

R. W. CLINE

The Relationship of Agricultural Engineering to Training in Vocational Agriculture

T. G. WALTERS, State Supervisor, Atlanta, Georgia

T. G. Walters

Editorial Comment

The cooperative procedures followed in Georgia for studying their farm-mechanics problems and for establishing in-service assistance to teachers are quite logical. Similar needs exist elsewhere, and workers in other states should find helpful suggestions in the experiences of our co-workers in Georgia.

TEACHERS of vocational agriculture are expected to deal in their teaching program with problems which high-school boys enrolled in agriculture are confronted with, as well as with problems of adult farmers. Teachers must be kept up to date on changing conditions as related to agriculture. In other words, there must be a continuous in-service training program. The rising standards of efficiency in agriculture require the training of future farmers and adults in better use of hand tools common to the farm, ordinary repair and construction jobs of the farm, in addition to the use of mechanized equipment.

The successful farmer must learn how to make use of this power and to operate and repair the machinery which discoveries and inventions have made available for his work.

The agricultural engineer is also concerned with these problems. Our mutual problems, then, is what is the best approach to the kind of relationships between the agricultural engineering division and teachers of vocational agriculture which will render the greatest service to the training program of our present and prospective farmers. A study of the situation several years ago revealed that the agricultural teachers' experience was limited, and that the technical subjects studied in college did not give the practical application of mechanical principles to a solution of the farmers' problems.

Agricultural Engineer Worked in Eight Demonstration Centers

The first cooperative approach to our problem in Georgia was when the agricultural engineering division of the state college of agriculture loaned for a year a member of the staff to work with teachers of vocational agriculture and staff members. This relationship resulted in a common understanding of our shop problem. It was impossible for one man to reach all the schools, so eight departments were selected in various sections of the state as demonstration centers. The agricultural engineer visited each of the eight departments for the purpose of working with the agricultural teachers. A floor plan was made showing the most desirable arrangement of equipment, storage of tools, and worktables. The teacher of agriculture followed the instructions of the expert relative to getting his shop in good shape, and at a later date the district supervisor called a group meeting of agricultural teachers to meet at the demonstration center. The agricultural engineer was present to discuss shop problems with the teachers and give demonstrations on certain shop skills. Considerable progress was made as a result of this one-year program. The program served to arouse the teachers' interest in the next step in our cooperative program.

Cooperators Spent Three Weeks Outlining Shop Program

This was to select a group of teachers to spend three weeks at the state agricultural college to outline the kind of farm-shop program needed in the departments of vocational agriculture, and to point out some problems and ways and means of solving them. A representative of the teacher-training department and a representative of the agricultural engineering division worked with the group of teachers.

The group listed the following problems which teachers of agriculture have in carrying on a shop program:

1. What groups to reach
2. Planning the shop building, size, site
3. Setting up instructional program
   a. All-day boys
   b. Adult farmers
4. Learning how to do the job in the instructional program
5. Providing equipment, supplies, and material for shop instruction
6. Planning for teaching shop jobs
7. Teaching shop jobs
8. Setting up rules and regulations governing the operation of the shop.

The group also set up a number of criteria in each of the eight fields and made a number of constructive recommendations.

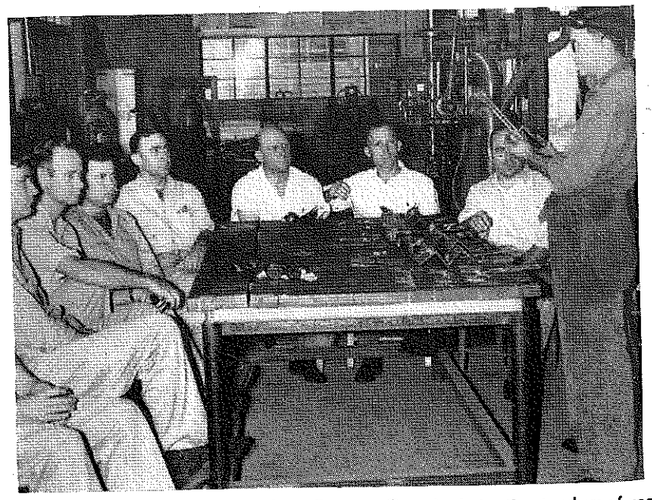
Particular reference is made to problem 4, "Learning how to do the job in the instructional program." The committee made the following recommendation:

"The members of the committee felt that they did not have sufficient knowledge and skills necessary for teaching many of the jobs that should be taught in the school shop. This being true, there may be three possible ways of solving the problem.

1. The first and most ideal way would be to provide a competent shop instructor for each vocational department.

2. The next possible way is to provide special short courses or shop clinics for those teachers in service who need shop skills.

3. The third way to help solve this problem is thru the pre-service training for prospective teachers. It is recommended that the agricultural engineering department continuously study the needs of teachers in the field and conduct their teacher-training courses in such a way that essential shop skills are developed."



Mr. W. E. Thombs, teacher of agriculture, Pearson, Georgia, instructing teachers of vocational agriculture in the use of properly adjusted acetylene torch

Workshops Held for All Teachers

The next approach to our cooperative program was to organize during the past summer a workshop for teachers, which operated for a period of eight weeks. The teachers were divided into groups of 30 to 35 to attend a training course for one week. Because of housing problems at the university, the course was conducted at the state Future Farmer camp at Covington. Three instructors conducted the course, two of which were furnished by the engineering division, and one by the vocational division. A teacher of vocational agriculture who had become highly efficient in welding taught the metal course. The vocational division furnished the equipment and supplies.

The activities covered in the training program included arc welding; welding with oxyacetylene; removing and preventing rust on tools; sharpening, fitting and adjusting common hand tools—each man required to work on a set of tools from his own shop; use of common hand tools; operation of power tools; developing some carpentry skills, such as: building screen doors, doorsteps, cutting rafters, and cleaning paintbrushes.

In the farm-machinery shop various types of farm equipment were available, such as: tractors, combine, mowers, harrows, and cultivators. Part of this equipment was furnished by machinery companies. The teachers were taught how to operate and make simple repairs and adjustments of the most common pieces of farm machinery.

The teachers were given the opportunity to criticize and make suggestions for improvements. This proved most worthwhile since the teachers frankly discussed their problems and gave many constructive ideas to the leaders on planning future programs.

Follow-up Services Provided

The teachers discussed the needs for future training programs and services they would like to have furnished. Two services which the teachers suggested and which the engineering division and teacher-training department are furnishing are:

(1) A mimeographed list of plans which had been prepared by the agricultural engineers. Teachers were instructed to write to the engineering division for a copy of any particular plan they needed.

(2) The other service is providing teaching materials, or lesson plans on a number of shop jobs. Our subject-matter specialist and the shop instructor in the engineering division have worked together in preparing this material.

I will mention only two jobs—building doorsteps and cleaning tools. A definite procedure was followed in the analysis of the job as preliminary consideration to get the teachers to decide on certain decisions that should be made and done before attempting to practice skills, such as: procuring materials for doorsteps. The students are led to think thru the problem of deciding the kind of steps to build, considering available materials and cost factors. The second part of the lesson plan

(Continued on page 218)

Workbench Recommended for Use in North Dakota

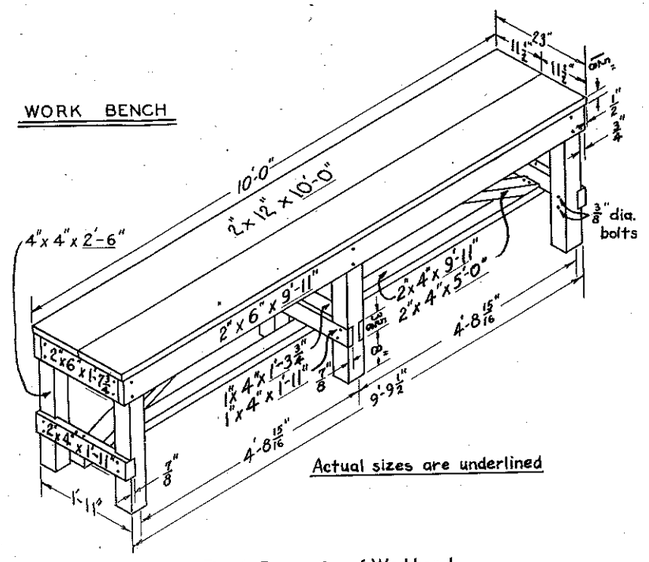


Fig. 1. Perspective of Workbench

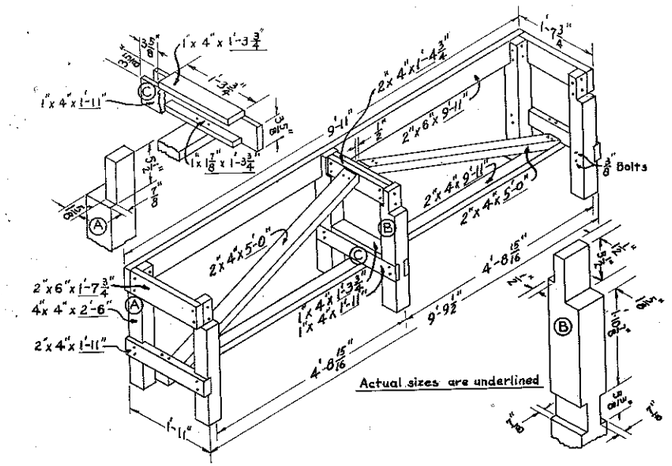


Fig. 2. Details for construction of workbench

Bill of Materials

Use	No. of Pieces	Size
Bench top	2	2″x12″x10′
Side rails	2	2″x6″x9′11″
End rails—top	2	2″x6″x1′7¾″
Legs	6	4″x4″x2′6″
Long bracing	1	2″x4″x9′11″
End bracing	2	2″x4″x1′11″
Upper center bracing	2	2″x4″x1′4¾″
Lower center bracings—sides	2	1″x4″x1′11″
Lower center bracing—top	1	1″x4″x1′3¾″
Lower center bracing—bottom	1	1″x1⅞″x1′3¾″
Diagonal bracing	2	2″x4″x5′0″

Hardware for Bench

4 carriage bolts, ⅜″x7″	12 carriage bolts, ⅜″x4¾″
4 carriage bolts, ⅜″x6½″	8 carriage bolts, ⅜″x4¼″
16 carriage bolts, ⅜″x5½″	5 doz. 3″, No. 14 flathead screws to fasten top
	2 doz. 2″, No. 10 flathead screws to assemble bracing

Future Farmers of America

A. W. TENNEY

The Collegiate Chapter F.F.A.

S. L. CHESNUTT, Teacher Education, Alabama Polytechnic Institute, Auburn

S. L. Chesnutt

THE collegiate chapter of the Future Farmers of America was started at Auburn in 1932. It was undertaken with a feeling of uncertainty on the one hand, balanced over against a felt need for specific training of our teachers in F.F.A. work on the other. It seemed that the only rational basis for any chance of success was to make the undertaking a part of our training program for prospective teachers of vocational agriculture.

To this end, we eventually agreed on a device which would materially help us achieve this purpose. This was a *Certificate of Merit*. The Certificate of Merit is given to seniors who meet the following conditions:

1. Be an active member of the collegiate F.F.A. for three-fourths of the period they are in the agricultural education curriculum.
2. Attend three-fourths of the meetings held while they are active members.
3. Participate in the activities of the collegiate F.F.A.

This, of course, requires some extra duties on the part of the secretary in the way of keeping accurate records of all meetings as to attendance, etc. It also requires some extra work on the part of the executive committee in assembling the data from the secretary's book.

These certificates are nicely printed on good paper, size 8½x11 inches, with blank spaces for name, date, etc. They are usually presented by the adviser at the annual banquet in May.

Our Officers

Possibly, a list of the officers and the more important committees, with some comment on their duties, will explain more clearly the operation of the collegiate F.F.A. chapter. It might be well to mention here that in order to give officer training to as many men as possible that a set of new officers are elected each quarter.

The president presides at all meetings and attends to the ordinary duties of a presiding officer.

The vice-president is chairman of the program committee; presides over chapter programs. He is probably the key officer and should be carefully selected by nominating committee.

The secretary calls the roll or checks the roll by having all present sign a slip; attends to all official correspondence or refers same to president. A good record book is provided by chapter funds. Reads the minutes of previous meetings. Posts notices of meetings at conspicuous places.

The reporter helps prepare news notes for college paper and for state F.F.A. paper. Works with the publicity committee.

The parliamentarian—selected for his knowledge of parliamentary practice. Calls attention to parliamentary breaches. This officer, when he functions well, can prove very beneficial in the training program.

The sentinel sees that paraphernalia is placed; the meeting place is ready; welcomes and makes new men acquainted. In this, all old men participate in a spirit of fellowship.

The adviser (who is an instructor in agricultural education) acts as general adviser; is a member of the executive committee, the program committee, and the nominating committee. Keeps in the background as far as possible and tries to develop leadership by over-all knowledge of the chapter's work and by getting students to perform all the various activities possible.

The assistant adviser (a student) frequently takes the adviser's place while a meeting is in progress and performs the duties pertaining normally to the adviser during meetings.

The Committees

Executive Committee—made up of all officers of the collegiate chapter. Makes a program of work (a program of work is appended). This program of work is so devised as to give as many training features as possible. Instead of local and community interests, collegiate activities have to be substituted. The executive committee has always, in a general way, had control of the bookstore (see below), also acts as a nominating committee for the election of new officers. This usually insures good officers (officers may also be nominated from the floor). This committee formulates the constitution and recommends or passes on changes in the constitution and bylaws. It discusses chairmen for the various committees and has a hand in their selection. The adviser works very closely with this committee or special members of it, and it is here that he puts over most of his ideas and plans for having the chapter perform its specific training functions.

The Program Committee—the vice-president is chairman of this committee. It makes out a series of programs for each quarter. The adviser should have a general program for the year, and the program committee (of which the adviser is a member) should take from this program certain training topics included in the yearly program and fill in the quarter program with other timely topics. Particular attention on the part of the adviser is demanded in making out a yearly chapter program and correlating with this the four quarter programs covering the year's work.

The Social Committee—chairman of the social committee is appointed by the president. The treasurer is usually a member of this committee. Some of the activities arranged are:

(a) Joint meetings with the F.H.A. (home economics organization).
(b) One or more social affairs with the F.H.A.
(c) Providing smokes or soft drinks for chapter meetings
(d) Arranging an annual banquet where "Certificates of Merit" are awarded.

The Ag. Fair Committee cooperates with the Ag. Science Club in putting on an exhibit at the annual Ag. Fair. There are two distinct features to this: one is an exhibit of collegiate F.F.A. features; the other is a money-making feature, such as a barn dance, a cake walk, a "pup" show or any other means of securing some "easy" funds. The usual take on this feature runs from $40 to $120.

The Publicity Committee works with the reporter in preparing news items for college and state F.F.A. newspapers. Has charge of local broadcasting F.F.A. program. This is put on weekly at Station WJHO, four miles out, and is handled by a special committee on radio work.

Committee on Cooperative Activities works with the state F.F.A. association in their yearly conference at Auburn. Each member of the collegiate F.F.A. pays the state association 10c per year for the state F.F.A. newsletter.

Workroom Committee—the department of agricultural education maintains a workroom containing a library and reading room with tables and equipment for study. The workroom committee has a member of the collegiate F.F.A. in the workroom at certain hours to keep the room open and to give out books and other reading material.

Sports Committee—this is a rather important committee since it has an opportunity to arrange for a team in any competitive sports indulged in on the campus. Our teams have reached the point where we are winning an enviable place in such intercollegiate sports as softball, touch football, basketball, and volley ball.

Our F.F.A. activities, in this respect, have done as much to give our organization an entity in college activities and have helped considerably in giving us a recognized position in college life.

Operated Bookstore

Bookstore Committee—this has been in the past a rather important committee, but the college has recently taken over the bookstore and this committee has ceased to function. Incidentally, we might give a brief account of the bookstore as an example of collegiate F.F.A. activities. The bookstore was organized in 1936 by borrowing $1,000 from members of the faculty. The store operated for 11 years and sold out to the college for $9,937.21. This amount was turned over to the state F.F.A. association with the understanding that if a state camp would be established, the collegiate chapter would raise the additional $62.79 necessary to make the total amount an even $10,000. Since the bookstore, one of the main activities of the collegiate F.F.A. chapter, is a closed book, we are looking for another outstanding activity which can take its place. So far, we have not settled upon it. But if we look long enough and hard enough, probably we will uncover something to take its place even tho it may not prove so profitable financially.

Conclusions Regarding Function of Collegiate Chapters

In conclusion, I would like to say that I feel that the only sound basis for establishing a collegiate F.F.A. is with the idea of making it function primarily as a training device for students in agricultural education. Enough variety, social features, etc. must be added to the chapter programs to induce the students to attend. Enough committee work must be formulated to keep a good proportion of the students active and a final reward, such as the Certificate of Merit, should continually be held up as a means of motivating the members.

There is no question that the experience gained in the collegiate F.F.A. will give the members some vital training in performing their duties as advisers of chapters when they come to teach vocational agriculture, nor is there any question of their approaching the responsibility of carrying on F.F.A. work with too much fear and trembling.

Program of Work
Auburn Collegiate Chapter F.F.A.

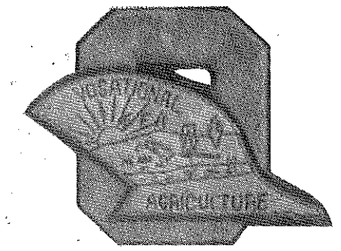
I. Acquisition of Professional Training
  A. To conduct such meetings so as to acquaint the students with the following:
    1. General organization of local chapter, state association, and national organization
    2. The opening and closing ceremonies of an F.F.A. meeting
    3. Requirements for each degree
  B. To give as many members as possible a chance to participate in initiations
  C. To conduct each meeting by Roberts Rules of Order
II. Cooperative Activities
  A. To keep in touch with the local F.F.A. chapters within the state
  B. To appoint three delegates to the state F.F.A. convention held in Auburn
  C. To encourage as many of our members as possible to attend the state conference held in Auburn
  D. To send one delegate to the national F.F.A. convention
III. Social Activities
  A. One or more social affairs to be held each semester
IV. Publicity
  A. Supply local chapters with F.F.A. news each month thru *State News Letter*
  B. Supply local chapters with F.F.A. news each month thru *The Alabama Farmer*
  C. Supply F.F.A. news articles each month to *The Progressive Farmer*.

A School Letter for F.F.A. Work

CARL M. HUMPHREY, Adviser, Odessa, Missouri *

WHERE is there a boy of high-school age who does not like to be rewarded for his achievements? Do boys play football, basketball, and baseball just to build more rugged bodies? I am sure if there were no press stories, or athletic letters to be awarded to the players who meet the requirements, there would be many, many fewer athletic teams. Since I began teaching vocational agriculture and became adviser to an F.F.A. chapter, I have had a feeling that some type of award could be worked out on a local basis as a reward for the boy who was doing a good job on the F.F.A. "team" as well as on the athletic team. Do not get the wrong idea, I am not opposed to sports—I am fond of them.

Our first step in that direction was to award a letter to the boys who were on a judging team that placed in the top 5 in the state contests. This seemed to work well for awhile, but the awards were not reaching many boys, and the goal seemed almost out of reach of a majority of the members. Just as we were about to develop what seemed to be a workable plan, along came the war and put a stop to most of our contests, shows, and other F.F.A. activities.



Design of letter used as award in F.F.A. chapter at Odessa, Missouri

With the aid of a very energetic group of F.F.A. members, a system for awarding school letters was developed in our school. Our boys are very much interested in it, and I believe other groups might like to check upon the plan.

We made the following list of activities in which the members might take part, and formulated a schedule of point values for them.

Activities	*Points*
State Farmer degree	35
President of local chapter	15
State officer	50
Local officer	10
State judging team	10
First-place rating in state judging contest (Individual or team)	10
District judging team	7
On qualifying team for state contest	7
Exhibiting livestock at state fair, June lamb show, Midwest show, district fair, or American Royal	10
Champion animal at any of these shows	25
Reserve champion animal	15
1st place in any of the above shows	10
2nd place "	9
3rd place "	8
4th place "	7
5th place "	6
6th place "	5
7th place "	4
8th place "	3
9th place "	2
10th place "	1
Any other place "	1
Second-place rating in state judging contest (Individual or team)	7
Each successfully completed productive project	5
Placing in a county or local livestock or grain show	3
Local chapter athletic team	2
Taking part in F.F.A. assembly program	2
District parliamentary procedure or radio skit team	10
Entering district public-speaking contest	15
Winning district public-speaking contest	20

Check Sheet Kept

A check sheet is kept in the permanent records of each student. On this sheet he must put his name, the activity he has completed, and point value of the activity. There is also a column for the instructor to initial his OK for each activity completed.

A total of 150 points is required for a student to win this award. The points are kept on an accumulative basis. Ordinarily, it takes two full years of F.F.A. activity to fulfill the requirements for the special letter.

This system of making the award has proved a great stimulus to members participating in all F.F.A. activities.

*Mr. Humphrey is now district supervisor of agricultural education in Missouri.

Stedman, North Carolina, Chapter Purchases Fruit Trees Cooperatively

THE picture on the cover page shows a special F.F.A. committee of the Stedman, Cumberland County, North Carolina, chapter unpacking a cooperative order of fruit trees. This is the seventh consecutive year that the chapter has made a cooperative order of trees. Some of the trees that have been planted in the community are now bearing fruit.

The chapter members take the full responsibility for making up the orders, collecting the money, placing the orders, setting out according to planting plans, and the full cultural practices, under the supervision of their adviser, E. F. Hubbard.

District F.F.A. leadership schools have been held annually in Kansas since 1931 with the exception of one war year when travel restrictions forced their cancellation. The primary purposes of the leadership schools are, (a) improvement in the use of rituals, (b) broadening knowledge of the F.F.A., and (c) exchange of ideas on building and executing programs of work.

Thoro Planning Basis of Successful Farming Programs

W. R. BRYANT, Teacher, Canton, South Dakota

THE plan for a successful project program will differ with each instructor and the community in which he teaches. I feel that the supervised farming program here at Canton has been very successful.

In this short article I shall endeavor to picture the way in which the boys are guided and led into the program, rather than pushed into it.

I have taught in this system for the past 10 years. I believe long tenure is my greatest aid in the project planning. It enables me to know very well the beginning student's farming background as well as that of his neighbors. Being acquainted with his parents and their farm is not enough, as all of his neighbors will directly or indirectly influence him. Knowing the boy's entire surroundings then better enables me to guide him into a sound program.

When new boys enter the department, they are not told that they must have a project. We study the programs of other boys in the department, picking out key boys who live as neighbors to some of the new boys, and not until the boys begin to ask how they can get started in a farming program are projects discussed in relation to their own work. In this way it is the boys who want to have projects instead of me telling them it is necessary.

Motivating Interest

It is then time to have the boys start talking to their parents of projects and getting some idea of what they can do as beginners. I spend much class time on plans, budgets, records, and desirable projects, and follow this with individual conferences. My schedule is so arranged that teacher-boy conferences can be held frequently in addition to the special group conferences which occur during class time. The secret of all good project work lies in proper guidance and planning before the enterprise is started. I have found that if the plans are properly laid, less home visits are necessary, but those that are made are more worthwhile. I do not believe in too many visits unless a reason can be had for their being made. It is a good plan, however, to stop whenever passing the boy's place just to see the progress of his animals or crops. This shows the parents that you are interested. I do not class these calls as visits but only observation stops.

At the close of each season when project records are completed, each boy's records are analyzed with him and ways suggested as to how he can better his program for the next year. All boys cannot expand at the same rate; so individual differences must be made.

In the past several years I have had nearly 100 percent project completion. Last year the average labor income per boy was $754.71. This figure in itself indicates the success of our program.

I believe it will be found that as soon as a sound supervised practice program has been established on the part of all the boys, the new boys will be eager to do their best and that little difficulty will be encountered.

Research Committee Requests Summaries of Studies

A THIRD publication of *Summaries of Studies in Agricultural Education* is being prepared for printing in 1947. It will include studies completed during the years 1941–1946. The active cooperation already given by leaders in agricultural education in collecting studies at various times during this period has been invaluable.

Any summaries which have not been submitted hitherto may be forwarded to the appropriate member of the committee. Prompt action will be necessary to insure their inclusion in the forthcoming publication.

Research Committee, Agriculture Section, A.V.A.

Martin, W. Howard (chairman)—North Atlantic
Sanders, H. W.—Southern Region
McClelland, J. B.—Central Region
Cline, R. W.—Pacific Region
Deyoe, G. P.—At large
Hammonds, Carsie—At large
Lathrop, F. W.—Ex-Officio

Relationship of Agricultural Engineering

(Continued from page 215)

takes up the procedure to be followed in actual construction. The first part of the job may be done in the classroom or by visiting nearby homes to inspect various kinds of doorsteps. The group is led to make definite decisions as to the kind, bill of materials, etc., before actually going to the shop.

The second part of the job is the operative side, with the class meeting in the school shop. Here the bill of materials from job 1 (procuring materials) should be on hand along with tools needed in actual construction. The lesson plan is to guide the teacher in the various aspects of concerning pupils with the operations of the job, and training pupils to become skilled in the operations.

This service can be greatly expanded and a system probably could be worked out for exchange, between states, of lesson plans of shop jobs common to the area.

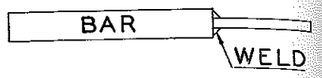
I have dealt entirely in discussing in-service training of agricultural teachers. The engineering division of the agricultural college has employed a special shop instructor to devote full time to pre-service and in-service training of teachers of vocational agriculture. I know that the training now in operation for prospective teachers is of a practical nature based on the experience that staff members of the engineering division have had with in-service teachers. I am convinced that prospective teachers now in training at the university will be better prepared to teach farm shop. I am also convinced that changing conditions in agriculture and lack of time while in college will require that we continue to give emphasis to an in-service training program. Our teachers are interested in graduate work; therefore, opportunities for graduate work in the field of farm shop should be worked out to parallel those in other agricultural subjects.

Teacher Timesavers

A Power Paint Mixer

Commercially packed paints are often difficult to mix due to sitting on the shelf for a long period of time. Ready-mixed red lead paint is probably one of the most difficult to mix thoroly.

A power mixer can be readily made by taking a bar of steel and welding to one end a rod that may be inserted in the electric drill.



If a ¼″ drill is used the size should of course be smaller than for a ½″ drill so as not to overload the power unit.

Several sizes could be made for use in various sizes of containers.

For quicker mixing, small projections could be welded to central bar to resemble the central portion of the mixing apparatus in an ice cream freezer, or a few holes could be drilled in the edge of the bar. —M. G. McCreight, Lincoln, Nebraska.

Leaders Produced in F.F.A. Chapter at Fallon, Nevada

LLOYD DOWLER, State Supervisor, Carson City, Nevada

THIS chapter has 65 paid-up members in the Nevada State F.F.A. Association for the school year 1946-47. Turning out outstanding leaders is a specialty of L. C. Schank, chapter adviser. The Churchill County chapter has developed six American Farmers since 1930 and two national officers, both student secretaries, and outstanding leaders in the national F.F.A. organization. Verl Hendrix served in this capacity in 1942, and Virgil Getto has just completed a year's service as national student secretary for 1945. Both boys are now actively engaged in farming at Fallon.

The Churchill County chapter has developed 40 State Farmers and the first state "Star Farmer" to be selected in 1946—Louie Venturacci. Louie now has his sights set on the degree of American Farmer which he hopes to receive in another year. The Churchill County chapter has another candidate for the American Farmer degree for 1947 in Ralph Bell, a brother of Amelio Bell, who was the first Nevada Future Farmer to receive the award of "Pacific Star Farmer."

Nevada is proud of the fine record being made by this group of farm boys under the able direction and supervision of Mr. Shank.

The F.F.A. chapter at Douglas, Wyoming, has acquired a 163-acre irrigated farm thru the War Assets Administration.

The seventh annual convention of the California Young Farmers was held at San Luis Obispo in February. Provisions were made at the convention for the newly elected state president to attend meetings of similar groups being set up in other states.

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