

# AGRICULTURAL EDUCATION MAGAZINE

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Solving Problems Together.

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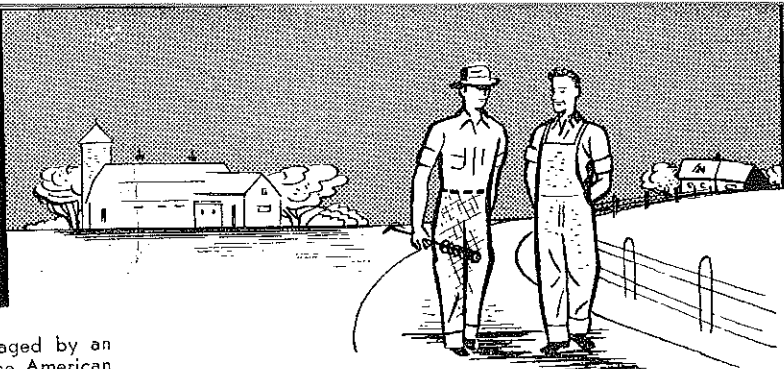
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# The Agricultural Education Magazine

A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by Interstate Printers and Publisher, Danville, Illinois.

THE INTERSTATE DANVILLE, ILLINOIS



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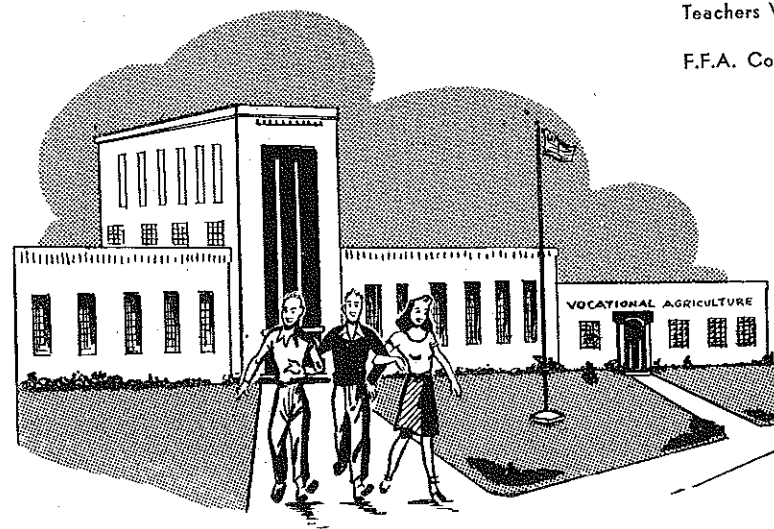
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## Editorial Comment

### Versatile leadership

IN our work with F.F.A. chapters, local cooperatives, advisory councils, adult and young farmers, special teachers, or other groups we play many roles. Usually it is the role of leader. Different groups and situations require different actions on the part of the leader. It would appear that teachers of agriculture have a most difficult assignment in that they are expected to play a variety of leadership roles. Few if any other teachers or professional workers in agriculture are required to be as versatile. Are we expecting too much in the way of versatility and adaptability from teacher-leaders in conducting a program of agricultural education which makes such diversified demands on the individual? Some believe that many of the teacher frustrations and failures could be traced to this requirement or to the failure to prepare teachers for meeting it.

More attention could be given to helping prospective teachers develop ability to adapt their talents of leadership to the several situations. We can stress the concept that leadership in the group is not any one individual's sole responsibility, but that it belongs to the group. The titular leader's function then becomes that of making it possible for the group to function to its maximum capacity in solving its problems.

### Guiding group effort

HELPING individuals to develop qualities essential to membership in a productive group is a major charge given to teachers in America. It is the greatest trust held by any group in our society. We may call it that of preserving the foundation of *democracy*—our way of life.

One of the first steps to making possible this growth of individuals is to center attention on the problems which the group regards as important. To what extent have we tried to implement this practice? Our answer might well be to a very limited extent with all-day classes but, to a considerable extent with out-of-school groups. In too many all-day classes, students' interests and needs are regarded as of little importance. The courses of study are organized about livestock and crops on an enterprise basis which may or may not coincide with group interests. Furthermore, a majority of our all-day classes are concentrating all of their class time on mass instruction with a result that smaller interest groups receive limited opportunity to weld their interest into the larger and common field of interest of the total group.

There are numerous devices which may be used to guide groups in reaching agreements on problems which are of common concern. Problem check lists, objective studies such as farm surveys, representative committees, small group work, and class discussion are accepted devices.

Does this approach really work? An unofficial report on a study, directed by Clara Brown Army of Minnesota, indicates that it does for home economics teachers. It is reported that those teachers whose students made greater gains than would be expected followed such practices as the following: (1) planned cooperatively with students, (2) evaluated achievement cooperatively and, (3) planned and carried out improvements cooperatively.

Our students have tangible and immediate problems that lend themselves admirably to the cooperative group approach. Moreover, farm boys constitute a segment of the population which is regarded as a prime factor in the continuing support of a democratic society. They deserve our most careful consideration in guiding group efforts to discover and solve their problems in a truly cooperative manner.

The editorial by Wheeler was adapted from a paper presented at the Southern Regional Conference. Although pointed to assistant supervisors in the original version, the message carried has significance for all.

### The human element in farming



J. T. Wheeler

I wish to challenge you, not with the problems of a changing type of farming or the changing technology in agriculture; not with the better methods of dealing with crop or animal production, but I wish to challenge you to study the problems of the human element in farming as a basis for professional improvement—a study of farm boys and their problems, a study of young farmers and their adjustment.

It is so much neglected in our present thinking in vocational education in agriculture, that I wish to emphasize it as the most valid basis for the professional

improvement of workers in our field of education. We are projecting educational programs that meet the needs of farm youth and young men. Therefore, we must study the vocational needs of these groups by looking at the nature of the groups and the needs of individuals in them.

#### Problems of Youth

First, let us look at the farm youth problem. In a general way, we are aware of the fact that farm youth are confronted with serious problems of vocational adjustment, because the birth rate in farm families continues to be relatively higher than in urban families. This fact alone poses a large problem of vocational adjustment for them. For example, in Georgia 70 per cent of the farm youth who were 10 to 14 years of age in 1920 had left the farms of the state by 1940. This amounts to a mass migration of our young people from farms to towns and industrial centers both within and without our state.

To understand the nature of farm youth such facts should be continuously compiled and studied. However, you may say it is none of our concern, what becomes of farm boys, if they do not choose agriculture as a vocation. I am quite sure some of us have taken that attitude in the past, but I am challenging you here to a broader view of vocational education for farm youth. A state program of vocational education in all of its aspects should be planned and developed in its relations to opportunities for vocational adjustment of all farm youth. We cannot have valid programs of agricultural education until we are willing to face the whole problem.

If you accept this challenge as one of the bases for professional improvement, you will find such questions as these arising and demanding answers:

1. How many boys annually leave the farms of my state? district? county?
2. Where do these boys go?
3. Why do they go?
4. At what ages do they make vocational choices?
5. How many local farm placement opportunities actually exist in my district? etc.
6. How many of the students in vocational agriculture actually become established in farming?

When you have found answers to these problems, you may evaluate the present agricultural offerings to farm youth, and ask: (1) "How well are present offerings and activities meeting the actual (not assumed) problems of vocational adjustment of farm youth and young men?"; and "What should the pattern of vocational education be for farm youth?" These problems are not like they were twenty and thirty years ago.

I say, when you find the answers to the questions I have mentioned above, you will begin to realize the tremendous problems of vocational adjustment that confront farm youth. You will begin to have an interest in a total program of vocational education as it affects the vocational adjustment of these groups. Past philosophies may be challenged and

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## Professional

S. S. SUTHERLAND

B. C. LAWSON

### Friends at home

W. R. FELTON, Assistant Supervisor, Stillwater, Oklahoma



W. R. Felton

NATURALLY we are all interested in our relations with men in high public office. To be on cordial terms with our Governor, U. S. Senators and Representatives, leaders of industry and business is an asset to any program. For the most part, I think

we have been fairly successful in our contacts and relations with this group. If we have not been, let's start immediately to correct this condition.

In most of our State F.F.A. Associations, we have honored the above mentioned group with gold keys emblematic of the State Farmer Degree. This is as it should be. Are we doing the same with our thousands of other friends who represent the little people? The farmer or small-town merchant who is not financially able to show his support of our program in such a spectacular way? I mean ordinary John Doe who is a firm believer in everything we do, who never finds the day too long or the night too dark to help us when we need help, to encourage us when we need encouragement, and to advocate the things we believe in because he also believes in them.

If you will pardon me for using my home state as an example, I should like to tell you the story of Tom Peyton of Guthrie, Oklahoma. Tom was a little man. He never held any public office; in fact, he never ran for office. He was an auctioneer—not one of the nation's leading auctioneers who sells \$50,000 bulls or advertises tobacco on one of the nation's leading radio networks. He sold farm sales for his neighbors and donated his services to the Church or American Legion, if they wanted to have a pie supper and needed an auctioneer free.

Tom always sold all the F.F.A. calves, pigs, and lambs in his home county after each county fat stock show or fair, free, of course. Tom wouldn't charge those farm boys anything for his services. Occasionally, some deserving boy would bring his animal into the ring and Tom didn't think it was bringing enough money, so he bought the animal himself. He knew every boy and knew whether he had made a good effort and was deserving help. Of course, the funny thing about Tom was that all F.F.A. boys were deserving and all of them had made a good effort. So, at the end

of each sale, Tom would wind up by owning several head of steers, barrows and lambs. He'd send them to the packers; and, of course, they would never bring as much as he had paid for them but he liked to help.

He attended the local banquets and he knew everybody and everybody knew Tom. He talked F.F.A. and he believed what he talked. One night the boys in the local chapter gave Tom an F.F.A. pin and told him he was now an honorary member. He wore that pin wherever he went and he took great pride in explaining what it represented.

### Interpreting the vocational program

J. R. CULLISON, Director of Vocational Education, Arizona

"TOO little too late" is an experience often encountered by State Supervisors and Directors of Vocational Education in attempting to interpret their programs in vocational education to members of the legislature. It is important that the elected representatives of the people be aware of the needs and benefits of vocational education before they assemble in regular or special session to appropriate the monies for the program. Many vested interests and pressure groups draw heavily upon their time during sessions so that very little effective work can be done by either the state staff or its constituents in justifying the needs of vocational education at this time. A single legislator's point of view toward a program may often determine the difference between an adequate or inadequate budget. Just one member who is quite vocal may be more effective in a legislative hearing than several thousand persons whose voices cannot be heard.

I do not discount the importance of conducting a program that is sound and defensible, but I do insist that a good program will be sustained only to the extent to which it is effectively interpreted to the elected representatives of the people. A few devices in selling the vocational program to members of the legislature have been effective in our state and are submitted below:

1. A twenty-minute parliamentary procedure demonstration was conducted before a joint session of the legislature. This was particularly well received inasmuch as a check-list of parliamentary abilities were distributed to the legislature in chart form with information regarding whether or not each action required a second, could be amended, was debatable, or required a majority

Tom sold too many farm sales in zero weather one winter and pneumonia germs caught up with him. However, he did have to get up and sell the F.F.A. boys' livestock and the result was he took a set back, as we say in Oklahoma.

There are Tom Peytons in nearly every community where vocational agriculture is taught. The moral of this story is we are aware of the great help we receive from these little men. We would like to tell Tom how we appreciate all he has done. We can't do it now and when we could have, we were too busy checking libraries or approving contracts or working on budgets. We would like to see Tom receive the Honorary State Farmer Degree at the next State Convention; but, of course, it is too late for that now. Our program is just as good or just as bad as our friends think it is. Let us always remember that we have thousands of loyal friends and some of them are little men who have a lot to do with shaping the thinking of the big men.

vote. Since approximately one-half of the membership of each house were new members, the demonstration was apparently very much enjoyed and appreciated by the legislature.

2. The members of the legislature were invited as guests of the Phoenix Technical School for a tour of the vocational program while classes were in operation. The student body arranged for chartered buses to pick up the members of the legislature at the Capitol Building at 12:00 noon and transport them from the Capitol Building to Phoenix Technical School. Here they were served luncheon which was financed by a friend of vocational education, and for about an hour and fifteen minutes were conducted on a tour of the shops and classrooms in the technical school. The tour was very effective in presenting a typical program in vocational education. Other activities which are effective include:

1. Inviting members of the legislature to attend annual F.F.A. banquet in connection with the annual convention.

2. Inviting members of the legislature to accompany state delegates to the national F.F.A. convention in Kansas City. Last year well over 10 per cent of the active members in the Arizona Association attended the convention and were accompanied by members of the press, local business men, one owner and operator of a radio station and one legislator.

3. Inviting legislators as guests on deep-sea fishing trips, hunting trips, hunting and fishing and other camping trips.

4. Inviting the Governor or members of the legislature to annual parent and son banquets.

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## Share responsibility and live longer

C. S. ANDERSON, Teacher Education, The Pennsylvania State College



C. S. Anderson

IN all probability at least seven out of every ten of my men readers will eventually die of heart disease. Not a very cheery opening remark, is it? Women have their own No. 1 killer, but heart disease is ours.

Considering men teachers as a group, including men engaged at all levels of teaching, in all types of schools, and without differentiation as to the subjects they teach, 70 per cent of them eventually suffer from heart diseases. If we accept the common belief that heart attacks among professional men result from sustained nervous tension and overwork, then the figure may be even higher for teachers of agriculture. We are pretty well agreed that due to longer hours of work, year-round employment and responsibility for many community activities, the teacher of agriculture works harder and expends more nervous energy than does the average man teacher.

During eighteen months of recovering and convalescing from a major coronary occlusion I have found time to delve deeply into heart disease research, that is such forms of it as a layman can understand. In the reports from the occupational branches of existing research I come up with the above-quoted startling figure for men in teaching. I wish special-group data were available for teachers of agriculture. Perhaps some day an interprising Ph.D. candidate will make a nation-wide study of the health pattern of teachers of agriculture and prepare a dissertation on his findings.

Occupational heart disease figures show convincingly that there is significant correlation between the existence of the disease and the mental stress associated with the occupations in which men engage. Men who work under pressure, and men who are constantly striving to achieve, are particularly vulnerable to attacks. Lawyers and business executives can look for early and frequent trouble. It is the No. 1 killer of doctors. Coronary deaths among them even outrate those among men teachers.

The physical demands of an occupation affect the heart less than the nervous and mental demands. Carpenters, bricklayers, stone masons, and plumbers have comparatively few heart attacks. Certain skilled workmen, such as the operators of precision instruments, rate higher, and here again enters the factor of tension. Only thirty-eight out of every one hundred farmers experience heart attacks. Common laborers seldom are troubled with it. A heart specialist who waited on me during my recent illness said that he had attended over three thousand coronary cases and he did not recall more than a handful

of his patients who were classified as common laborers.

Negroes have more heart disease than white men, especially arteriosclerosis or hardening of the arteries. Among whites, the Irish have more heart trouble than any other racial group. The Latin Americans seldom are bothered with any form of heart disease.

In 1947, 636,176 persons died of heart diseases in the United States. This was an increase of 38,000 over the previous year. Heart diseases took the lives of more people in 1947 than the combined toll of the next five most important causes of death, cancer, pneumonia, tuberculosis, nephritis, and accidents. The American Heart Association estimates that unless medical research comes forth with something new and effective as a preventive or cure, 1,200,000, Americans will die of heart diseases in 1960. The increase is expected to



A patient who knew how to relax and recover from a coronary attack. Even as he read he did not make the effort of turning the pages. Note the oxygen tank in the corner. Reprinted by special permission of The Saturday Evening Post. Copyright 1948 by the Curtis Publishing Company.

occur chiefly among the professional, and white collar group. This includes teachers, particularly men teachers.

#### What To Do

But enough of facts and figures! What can be done about it? Well, if you feel certain you are headed for trouble, resign from teaching. Go into an occupation where the risk from heart trouble is low. For the teacher of agriculture, farming is the best alternative. Your chances of a heart attack as a farmer are something like one-half as great, and farming is an occupation for which you are already adequately trained. Better check with your doctor or visit a good heart clinic before making any rash decisions. Cardiologists say that only about three out of five who

come to them for examinations actually have anything wrong with their hearts.

In spite of what is known about preferred occupations, none carries one hundred per cent immunity. You want to know how you may avoid a heart attack and still be a teacher. Actually we can improve the situation right within our profession if we really try.

*Work relaxed.* Of course this is easier said than done. No one knows better than I. After becoming ill, it required six weeks of around-the-clock nursing care, ninety-three hypodermic needles, and the use of more medical gadgets than I can enumerate to accomplish the feat. If you find you cannot feel relaxed while at your work, you had better do something about it.

*Stop worrying.* Learn to dismiss from your mind the mistakes you made yesterday about which nothing can be done. Stop fretting and losing sleep over the jobs you have to do tomorrow. As one authority writes, "live in day-tight compartments, shutting out both yesterday and tomorrow." Folks who live only for today do the minimum of worrying.

*Avoid emotional situations.* Emotional overstrain may seldom actually cause a heart attack but it certainly makes existing heart troubles worse. Keep away from the defensive position in your teaching and in your daily relations with people. When it comes to arguments, try just to be a good listener.

*Get sufficient rest.* This admonition brings up the frequent complaint that the work of the teacher of agriculture is fast becoming almost a 24-hour-a-day job. If your professional duties do not permit you to have at least eight hours of sleep and at least six more hours each day to devote to your family, your hobbies, your recreational, and your social activities, then I would look for another job. When physicians

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## Techniques for planning conferences

ALBERT ACKLEY, Teacher, Ovid, Michigan

THE teacher on-the-job must continue to keep abreast of the ever expanding program of vocational agriculture, of workable techniques for use in teaching, and of the new developments in the various fields of agriculture. A teacher of vocational agriculture, because of the nature of his program, finds it more difficult to attend summer school or college extension classes than most high school teachers. He must secure his in-service training in short, intensive courses on the job.

Conferences, short courses and meetings both on-campus and off-campus of Michigan State College are organized for teachers of vocational agriculture in Michigan, in addition to regular graduate classes. Teachers assist in planning conferences or short meetings which are held in high schools around in the state. The procedure used in planning these meetings is explained in some detail here. States that do not use teachers in planning such meetings should do so.

### Summer Conferences

Summer conferences are a "must" in a teacher's in-service training program, and are one of the best means of keeping up-to-date on the many changes in the field of agriculture education. Summer conferences have to be planned well in advance. In Michigan the summer conference planning committee meets in January or early February to lay the foundation plans for the conference which is usually held the last week in July or the first week in August.

The personnel of a Planning Committee is composed of the state supervisory staff, the teacher training staff of Michigan State College which includes the teacher trainers and supervising teachers, a representative of the division of Special Courses and Conferences of Michigan State College, and teachers representing the Michigan Association of Teachers of Vocational Agriculture. The committee is thus composed of teachers for whom the conference is planned and of those who are responsible for providing it. Such a procedure demonstrates teacher-pupil planning. Those who are members of the committee of teachers see in practice a method of teaching which was emphasized in their pre-service training. Their participation helps them to acquire or master the technique of teacher-pupil planning for use in their own local situations.

### The Planning Conference

At the first general meeting of the committee planning the summer conference the evaluation of the previous summer conference is usually presented by one of the teacher-trainers of Michigan State College. This evaluation was made at the close of the previous summer conference. At that time all teachers present reacted to the program just concluded and listed suggestions for the

next year's conference. This evaluation aids the planning committee in determining what the teachers liked or disliked about the previous conference. Reactions to such items as length of meetings, the number of panel discussions, the number and kind of field trips, the nature of the speeches, and the kinds of skills which were part of the past conference, are summarized. In addition teachers are encouraged to offer suggestions for different features in the following year's program. These are studied by the committee as a whole and worthwhile changes are adopted.

The policies for the coming conference are set up in this first general meeting. The first problem to come before the planning committee is the selection of the date for the conference. The Division of Special Courses and Conferences of Michigan State College present the dates for this particular conference which will fit into the summer schedule at the college. After the dates have been selected, then the various areas to be covered in the summer conference are presented and decided upon. Some areas have to be deleted or combined with others, due to a shortage of time and/or lack of facilities for presentation.

### The Sub-Committee On Planning

After the conference committee has decided upon the general theme, the outline of each area is broken down and given a specific time on the conference program. This requires considerable work on the part of a few persons after the committee meeting to contact people to make the schedule a reality. Since

## Methods and Materials

W. A. SMITH

adjustments are necessary a special committee composed of only one representative from each staff and the teachers' association meet to decide how problems should be settled. At this session, the full program and all the detail as to speakers, banquets, field trips and other activities which go to make a summer conference a success, are planned and woven into the program.

On the opening day of the summer conference, all committees and chairmen of meetings selected from the teacher's group meet in a special session to make sure each one knows his specific duty during the conference. It is very essential that all meetings in the program begin and close on time. Sometimes at the last minute, definite time and place arrangements have to be made. Thus this meeting clears the remaining problems, so that the conference may run smoothly. The time of giving out

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## Productive Conferences

HAROLD SILVERNAIL, Teacher,  
Edmonds, Washington

FOR many years the vocational conference of agriculture instructors' in the State of Washington has been an annual summer tradition. The group has met in different cities around the State where accommodations were available. Although the week's conference has always been well planned and very helpful, it still left much to be desired.

Our summer conferences have always been "work conferences" in which committees help to formulate policies for the coming school year. The idea is good; however, it is difficult for the supervisors to meet the many committee assignments, and usually the burden of formulating recommendations falls on a very few committee members. Some members do not have the opportunity to do their share of the work and new teachers have trouble orientating themselves. The week of conference, even with evening committee work, often does not give time to crystalize thought into a workable policy. Because of the shortness of the conference time, final approval of committee work is often rushed through without due consideration when the urge to "get home" invades the conference. At best, the conferences left something to be desired.

Now, to further complicate the situation, our state, for the past two years, has held a state vocational conference, bringing together all five divisions of vocational education. This unification of conferences has much to offer and undoubtedly will develop a united vocational education force; nevertheless, it has decreased the time available for our agricultural conference.

With the thought of overcoming some of our present conference obstacles, our

state supervisors have initiated a welcomed change, which will make our summer meeting more functional and useful. One-day supplemental meetings of teachers of vocational agriculture and supervisors have been called on a district basis. These Saturday conferences of twenty to twenty-five teachers discuss localized and state problems and every teacher gets in on the "ground floor" discussions. New teachers become orientated quickly and questions can be thoroughly thrashed out or sent to a local committee for more study. By holding several of these one-day conferences during the year, most every problem can be fully investigated so that the resolutions presented at the annual summer conference are well founded. This system also gives the supervisors closer contact with the committee work; thus many troubles can be avoided. If decisions cannot be

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## Joint planning insures effective teaching aids

F. E. KIRKLEY, Teacher Education, Clemson College, South Carolina

IN THIS discussion we shall consider not only the enterprises or areas for which teaching aids are to be provided, but also problems within these enterprises.

The first step in preparing teaching aids is to decide what is needed. *Who* should determine the needs for teaching material and *how* should it be done.

The three persons most interested in this question are: the teacher of agriculture, the district supervisor, and the teacher trainer. What part should the teacher have in determining needs for teacher aids? After all, he is the one who finally uses or doesn't use the material when provided. Is he in a position to know the actual needs, or is he likely to be too greatly influenced by his methods and by the things he likes to teach? Is the district supervisor in a position to properly make this decision, or does he generally accept the request of the teachers as regards teaching aids? Most states have a subject matter specialist or some member of the teacher training department delegated to prepare printed matter and other aids for teaching. He is likely to be the best informed as to research in agriculture and new trends in farming. However, his opportunities for contacts with both teachers and farm needs may be limited.

### Selection Related To Use

These questions are not intended to reflect on any one of these three, but to point out the weakness of any one person having the responsibility of determining what teaching aids are needed.

Some of us, I am sure, have seen some good teaching materials that were not used, some that could not be well used with farmers and farm boys, and some that did not lead toward the solution of a farm problem. Did the *who* and the *how* of determining these materials have anything to do with their use? Let us ask this question, "Does the method used in determining the need for aids and materials have any relation to their use after they are provided?" We are familiar with the requirements of teaching materials.

Some of these are:

- (1) The material should be based on problems found on the farm,
- (2) Its application should lead toward solving a farm problem,
- (3) It should include the most recent and dependable findings,
- (4) It should be organized for teacher-use.

This provides us with what we might call good material. But, material alone does not *change* farm practices. It must be properly used in the instructional program. For any material to be most effectively used, the teacher must first, realize the importance of the enterprise in his community; second, he should

understand what the problems are within the enterprise; third, he should have a clear conception as to what printed matter and other aids are needed to solve these problems; fourth, he must know how to use the material when it is provided. These may be thought of as objectives in the use of teaching materials. How may these objectives be reached? They may be reached, or at least approached, by having the teacher participate in determining the problems for teaching aids.

### Definite Procedure Followed,

The procedure that we have followed in this state for several years in determining the problems for which teaching aids are needed is briefly given:

#### First Step:

The enterprise or area is determined. One way this is done is by having all teachers, during the state conference list, on a prepared sheet, all enterprises or areas in which they feel a need for teaching aids. These requests are then studied by the teacher trainers and the supervisory staff. An enterprise or area is then selected for the preparation of teaching material. The things considered

#### Third Step:

Teachers who have done more or less outstanding work on this enterprise are visited. Their experiences and opinions as to what is needed and what is usable are carefully considered. The kinds of teaching material they are using are examined.

#### Fourth Step:

The teacher trainer and district supervisor meet with teachers in small group conferences. The teachers are encouraged to take the lead in determining the teaching problems within the enterprise. Again the teacher-experiences are fully used. Frequently the activities in this step are carried out by a committee composed of experienced teachers, teacher trainers, and members of the supervisory staff.

#### Fifth Step:

At this point we have an outline of all the problems to be taught within the enterprise. This is discussed in detail with a specialist in that particular field. This may be a head of a department at the college or a member of the Experiment Station Staff.

#### Last Step:

After the material is prepared, it is distributed during small group conferences. Here the content and its use are discussed.

This procedure, we feel, in part answers some of the questions in the



Teacher trainer and teachers of agriculture discuss use of teaching material.

in making this selection are: economic importance, availability and quality of related material, number of teachers affected, new trends and methods in farming, and the commonly known farmer-practices.

#### Second Step:

The importance of this enterprise is then discussed, usually at the state conference. Supervisors, teacher trainers, and teachers take part in leading this discussion. As a rule a technical expert, who may be a representative of the state agency in this field, is used at this time. The need for teaching the enterprise, and its teaching possibilities are emphasized.

beginning of this discussion. The supervisory staff, teacher trainers, and teachers all play a vital part in deciding upon the needed teaching aids.

We must continue to emphasize the need of appropriate content for teaching. At the same time we must guard against the tendency to feel that the job is finished when aids are prepared and distributed. The results can be no better than the use made of such aids. This plan, which we are attempting to follow, in determining the problems for teaching aids, is apparently resulting in a more desirable use among teachers.

## Providing special teachers for adults

THOMAS H. KERREY, Supervisor, Michigan



T. H. Kerrey

WE are faced with a tremendous need for expansion of adult education in agriculture while there is still a shortage of well-trained teachers.

The teacher of vocational agriculture is undoubtedly aware of the current trend. Many farmers

have become accustomed to going to the schools for help. This trend will increase as veterans complete their programs. It is a trend which school people and schools cannot ignore.

However, it is impossible to expect one teacher in a community to meet these needs satisfactorily. If the job is to be done with some degree of efficiency and effectiveness, additional teachers must be induced to prepare themselves for the job.

When thinking of the selection and training of special teachers for adults, it will be well to keep in mind the qualifications and training which experience has shown a superior teacher needs. The National Committee on Standards in Agricultural Education pointed out in its bulletin, *An Evaluation of Local Programs of Vocational Education in Agriculture*, that the "very superior" teacher in agriculture is a graduate of a recognized teacher training institution. His training has included:

1. Technical agriculture which is co-extensive with the important enterprises of the community where he teaches
2. Participation training in agricultural education
3. Living on a farm during childhood
4. Mature experience in farming including extensive managerial responsibilities
5. Continued technical and professional training since graduation from college.

The teacher responsible for the adult education in agriculture usually works in communities that do not have directors or supervisors of vocational education. Therefore, the development and success of the program of adult education will, for the most part, depend upon the ability of the teacher to work without the aid and guidance of a local director or supervisor. At the present time, we are attempting to take individuals who are interested in teaching agriculture to adults and with limited training let them conduct such classes, in some cases, with and some without, the guidance and supervision of the local teacher of vocational agriculture. Too often the local teacher of vocational agriculture has most of the on-farm

instruction to carry out as the special teacher is too busy farming to complete this part of the job. As a consequence, much of the follow-up or on-farm instruction becomes superficial and ineffective. Therefore, it is important that we train men for the job who have high qualifications and can give their entire time to the program.

### Selecting and Training Personnel

1. There are cases of superior teachers of vocational agriculture now employed in the day-school program that wish to spend more time with the adult program.

2. Teachers now involved in the institutional on-farm training program who possess many of the qualifications should be encouraged to continue their training. They may wish to transfer to the teaching of adults.

3. Many communities will find farmers with technical training of college level who may wish to take further technical and professional training leading to the teaching of adult classes in vocational agriculture.

4. Most communities have young farmers who have completed the courses in vocational agriculture at high school level. A few may consider attending college to prepare for the teaching of vocational agriculture to adults.

Special training for many of the above mentioned men must be provided. Pre-service training courses for those not certificated have been very helpful in preparing teachers. When prospective teachers have not been responsible for

in-service course to fit their specific needs.

District conferences are offered, on request, to teachers. The teachers choose the phase of work most needed by the group.

Both types of in-service training are conducted on a cooperative basis by members of the teacher training staff, the technical staff of the College of Agriculture, the state supervisory staff, members of the U.S.D.A. Council, soil conservation, extension and other agricultural agencies also cooperate. All schools are visited by both a member of the teacher training staff and a member of the supervisory staff where new teachers are employed. This gives the new teacher an opportunity to discuss individual problems regarding his program.

The improvement of teaching is an important responsibility of the supervisory staff. Supervisors must be constantly alert to opportunities to help with this phase of the program.

Michigan has also set up a plan whereby all teachers of vocational agriculture including those responsible for adult and young-farmer classes and veteran groups may receive special training in farm and home planning. Sixteen clock hours of instruction in farm and home planning are given at all pre-service and in-service training courses. This work is also available during the one week summer conference. Due to the large number of persons involved in offering this work, the teachers located at the most distant points from the college are given the first opportunity to enroll in farm and home planning during these sessions. Teachers near the college are given this work in district conferences. This conserves considerable time and money.

Until such time as an adequate supply



both classroom and on-farm instruction, pre-service training courses should be required before special certification is made to these prospective teachers.

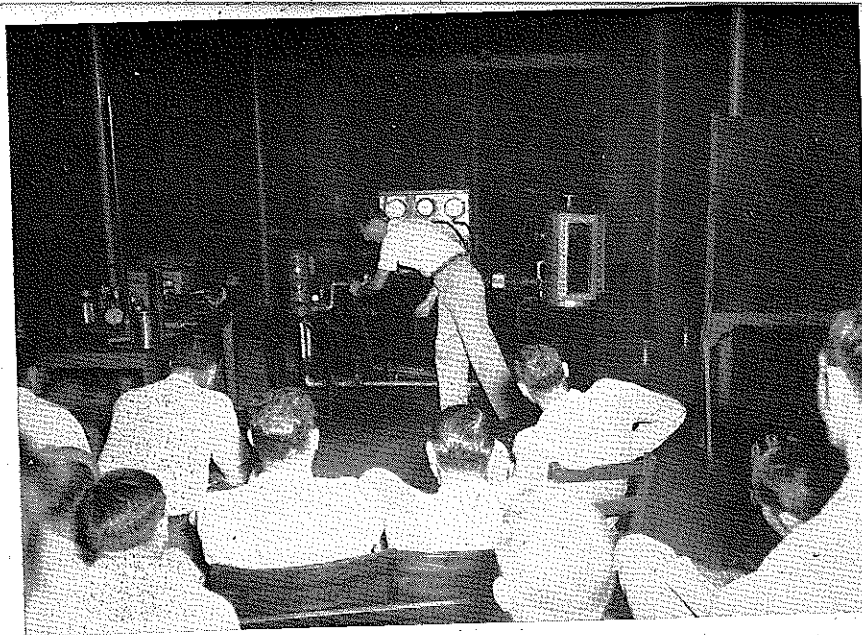
The pre-service training courses offered at Michigan State College are planned to meet the needs of a group enrolled. When the group needs both technical agriculture and teaching techniques, the pre-service courses have been three weeks long. The time is divided to meet the needs for both technical agriculture and teaching techniques. When the group is comprised of men who are up-to-date in the needed technical agriculture, two weeks of intensive work on teaching techniques have been offered. These pre-service courses are followed by three or four one week in-service courses offered at Michigan State College during the year. A record of teachers attending and their needs is studied in planning the courses offered so that teachers may choose a particular

of well-trained men are available, the local teacher with outstanding ability and training can do much to help special teachers in the local communities to improve their teaching. The procedures of a specific teacher will illustrate some of the possibilities and limitations of this method.

### A Local Training Program

The teacher secured the help of twelve key farmers in his area who had considerable technical training in agriculture. They were successful farmers who were well accepted by their fellow farmers. These farmers were granted special certificates to teach adult education in soils. The group met with the teacher of vocational agriculture and planned the course around the needs of the farmers in the areas represented. A specific topic was chosen for each meeting to be held. Each week the special teachers, acting as farmers, enumerated

(Continued on Page 132)



Teachers pick up fine points on planning and installing a water system.

## Demonstrations as basis of teacher conference

T. G. WALTERS, Supervisor, Atlanta, Georgia



T. G. Walters

WE in Georgia have always tried to plan programs for our annual conferences which would deal with the problems and needs of teachers. It has been our experience that conferences planned this way are of more interest to the teachers and of more real value

to them in improving the programs of vocational agriculture in their home communities.

Prior to last summer our conferences had been devoted primarily to reports, speeches, discussions and the distribution of a great deal of mimeographed and printed material. These conferences were admittedly somewhat uninteresting at times, although the programs were carefully planned and conducted.

Keeping in mind our goal of helping teachers meet their more pressing problems, we last summer planned a conference program which placed emphasis on a series of six two-hour demonstrations. We felt that the demonstrations would add interest and certainly would provide the most effective means of getting certain types of information to the teachers.

With the growing emphasis on livestock and the increased number of livestock shows in which Future Farmers are participating, we found that some of our teachers needed additional information on how to fit and show animals. So we set up a demonstration on fitting and showing dairy and beef cattle.

To be sure that the information passed on to our teachers would be

correct, we requested authorities on the various subjects to conduct the demonstrations. The field man of the Jersey Cattle Club conducted the demonstration on dairy animals; the herdsman of one of the state's leading Hereford breeders handled the demonstration on beef animals.

The other demonstrations included "farm electrification," "treating fence posts," and the "installation and use of water pumps" all of which were conducted by representatives of the engineering department of the College of Agriculture, University of Georgia; "use of concrete," conducted by a representative of the Portland Cement Association; and "the use of visual aids and research information in teaching," directed by representatives of the College of Education of the University.

In all these demonstrations the leaders

not only fully explained but actually showed how the different jobs should be performed. A fence post treating outfit complete with boiler was set up, the posts peeled and treated. Cement was mixed and poured into forms after its uses and the best ratios for these uses had been discussed.

Our teachers liked these demonstrations immensely. Old and new alike agreed that the demonstrations afforded them an opportunity to learn things which they had missed or only touched on while in college and for which they had later found a need. They agreed, too, that the demonstrations made the conference tremendously more interesting and helpful.

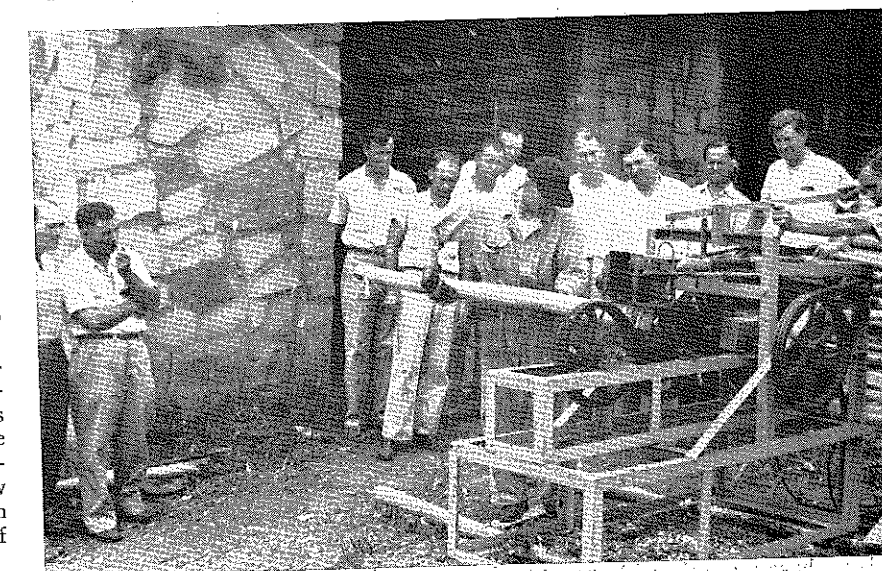
### Conference Problems

How did we decide what kinds of demonstrations to have?

In arriving at the problems which are common to the larger number of teachers and the demonstrations which will be most helpful, we rely on the observation of supervisors and the answers given by teachers to questions as to what kind of information and help they need. We also try to tie into our programs new developments or trends in agriculture.

As an example of the way we bring trends or progress in agriculture into our conferences, in 1948 we devoted a large amount of time to discussion by authorities on winter grazing and year-round pastures and distributed materials giving the latest experiment station data on these topics.

Teachers went out during the following fall fully prepared to give farmers, veteran trainees, and Future Farmers the very latest information about the possibilities of these pastures and the fertilization, seeding, and management practices which should be followed. We had a winter grazing contest in which F.F.A. boys from 170 chapters participated and a VFTP year-round grazing contest in which nearly 10,000 veterans submitted entries. On the basis of this we feel that our teachers did a big and very creditable job and that their good showing was enhanced by the stress put on pastures at the annual conference.



Checking on the use of post peeler.



## Farm problems solved

MARK WOLFRAM, Member of the Monroeville, Ohio Institutional On-Farm Training Class

IF YOU want to experience complete bewilderment, find yourself standing on your newly purchased 86 acre farm after you have spent the previous 10 years of your life working in the city room of a metropolitan newspaper and in service.

Imagine the difficulties that would confront someone who had had no previous farming experience and who didn't know a grain drill from a corn planter.

On top of these obstacles, I received little encouragement from the Huron County extension agent, Guy Hummon, who now is an executive of the experiment station here. Through newspaper work, I was familiar with the work of the county agents, so that was my first stop and first step after I became a farmer, or, I should say, a farm owner.

Guy Hummon told me the land I had purchased was known locally as "black-berry ground" and that it was doubtful if it was even worth tiling. But if he was brutally frank he was every bit as practical. He urged me to do two things immediately: enroll in the G. I. vocational agricultural class that was just then forming in Monroeville and to contact the local planner of the U. S. Soil Conservation Service. I doubt if I can explain fully in how great a measure both the vocational agricultural class and the Conservation Service have been in launching me successfully in a difficult and entirely new way of making a living.

### Help When Needed

We bought our farm in the fall of 1946 and when spring came I had already been a month in the Monroeville G. I. farm class. Fred Deering, our instructor, was at my farm the first morning I ran the tractor out of the barn with the rather hazy idea of starting to plow.

Figuratively, Fred Deering has been there every time I started out on a new, and to me, strange type of work. For, although, he couldn't possibly be present each time, the material covered in the classes and his availability to answer my host of questions made my first and succeeding steps in farming almost a partnership with Fred.

Inexperienced as I was, it was evident that our farm had been badly abused and needed much hard work and a thorough rejuvenation to put it back in a condition where it would be profitable. Obviously, Fred, and Bob Calhoun, the soil conservation planner, were much more aware of the needs and program I must follow to make a success of farming.

From our studies I was soon convinced of the need of liming and legumes. Soil tests showed that practically all of the farm had a pH remarkably similar to the alcoholic content of Sunday beer. An elderly neighbor told me soon after we bought our place that he hadn't seen more than a couple of clover fields on it in more than 40 years. Today I have more than 50 per cent of our farm either with mature clover, new

seedings or sweet clover turned under for this year's corn.

Another member of our G. I. class said he once picked corn on our farm several years before we bought it and that he ran his picker all morning and didn't fill one wagon. Last year our corn crop averaged 60 bushels. This is not a guess, for I applied for and received a government loan on the majority of the crop and the government, doesn't over-estimate when it gives a loan. I found figures at the AAA office that previous wheat crops were under 20 bushels. My first wheat last summer was a shade over 38 bushels to the acre.

I realize these figures are not record-shattering, but from ground that had been soy beaned to death and mistreated they were a decided step forward. Even my neighbors said so and they are more competent and impartial judges than I am.

This really isn't bragging, for you must realize the results I have obtained have come in direct proportion to how closely I have followed the advice Fred has given me. He showed me the need for liming and legumes and I applied between 4 and 6 tons of agricultural limestone to each acre that I could afford, and as far as it was possible for me to do so I sowed clover seed, mammoth, sweet and ladino. Fred preached a higher rate of fertilization than had been used on this farm previously and I followed his advice. That was where my 38 bushel wheat crop came from. I know, because I tried a round with a meagre amount of 3-12-12 and the result was conclusive. The wheat in that

## Farmer Classes

J. N. WEISS

MARK NICHOLS

round was barely worth combining, while where I drilled 400 pounds of 3-12-12 the wheat equalled any in the neighborhood and was far better than the majority.

Fred is as set on using high nitrogen fertilizers on oats as he is on having class start on time. I followed along with him on this, too and applied 400 pounds of 8-8-8 fertilizer. Last year my oats went 60 bushels and weighed 38 pounds, and they were planted in soy-bean ground that was only disced, at that.

### A Plan Grows

With the help of my teacher, my 86 acres are now farmed with definite plans and objectives, chief of which is to increase fertility. No fields are slighted, and while I have forsaken some immediate small profits by allowing clovers to grow instead of turning out all cash crops, I feel confident this long-range plan will more than offset these periods now of small income.

In, Farm Problems Solved, a farm veteran student speaks out. It points up thinking and attitudes held by many young farmers enrolled in effective programs. Wolfram presented an expanded version of this material to a conference for Ohio teachers.—Watch for your January issue of this magazine which will feature programs for young farmers. —Editor

My inexperience made immediate large-scale specialization impractical. It was task enough to learn how to do the everyday work of farming. While the term, "inexperienced" still fits me, I have now taken the first steps toward two main objectives: converting one 10 acre field into an intensified farming project and keeping one or two thousand laying hens. The 10 acre field, comprised mostly of a fine sandy loam, is divided into five two-acre fields and will be farmed in units with a rotation of two years of strawberries, wheat seeded to clover, meadow two years, and sweet corn seeded to rye. Eventually, we will attempt to have two acres of bearing strawberries each year.

Our first strawberry crop, a quarter of an acre, yielded better than 2,000 quarts.

We now have 100 hens in the laying house and more than 300 pullets raised on a 2½ acre Ladino clover range. The pullets were housed in an experiment station recommended range shelter built by the Monroeville High School shop class under the supervision of John Everett, regular teacher of vocational agriculture, who volunteered to help me with that project. When we are financially able we plan to build a large, modern laying house. I am selling my

eggs to one of the leading hatcheries in the district and dress and sell the majority of the cockerels and old hens myself. When I say, 'myself, I should really say, my wife and I, for she does a large part of the work in this phase of our farm operation as she does in all the others, in addition to rearing our two boys.

There are many other plans that we hope to complete in the future. A good many thousand feet of tile are needed, there is pasture to be improved, fences put up and hedge fences to be pushed out so some of the smaller fields may be combined and made into larger plots of more economically farmed land.

I neither claim nor believe that our progress has been outstanding or sensational, but I know definitely that with the veterans training course and with the constant assistance of Fred Deering I have avoided the majority of mistakes, both large and small, that I would have made had I begun farming alone.

## Planning program of study

C. A. PLATT, County Supervisor, Wauchula, Florida

IN planning the instruction for the veterans on-the-farm training, information as to the needs of the veterans in the area was obtained from farm surveys by the instructors. We also had the experience of four instructors of veterans, each instructor having ten or more years experience in professional agriculture in the area.

In organizing the units to be taught we have two divisions in the course of study. The class instruction is planned for two hundred hours per year. The on-the-farm instruction is for one hundred hours per year and individualized to fit the problems of the farmer and the farm. The on-the-farm units are determined by the veteran instructor, local supervisor and the veteran after the farm survey has been completed.

### Objectives

The main objectives kept in mind in making up the course of study were:

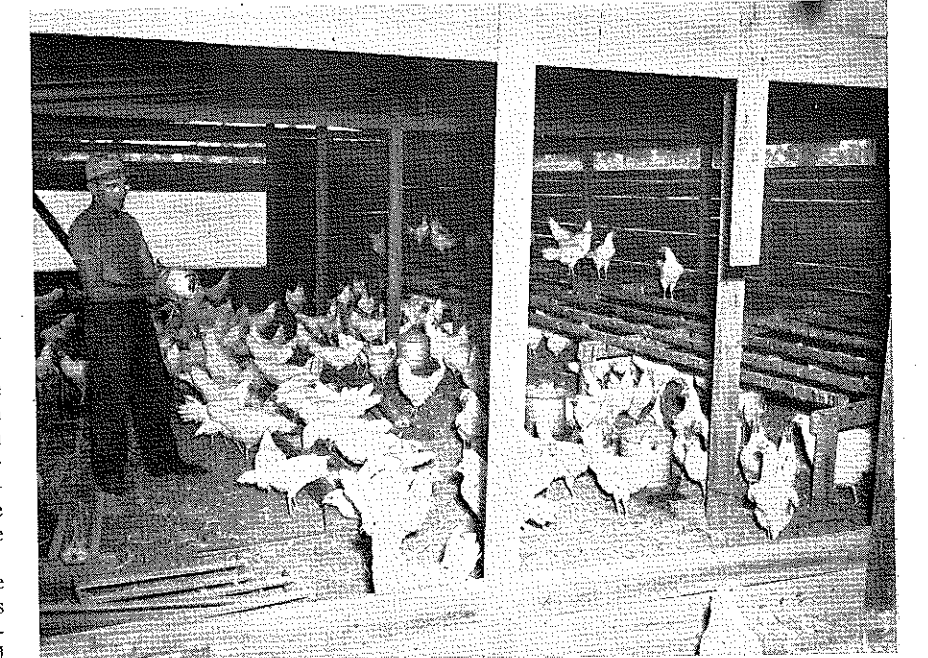
- To establish veterans in farming
- To establish approved practices in farming operations
- To develop a higher standard of living among veteran farmers
- To develop farm skills needed by the trainee.

A good example of our plan is the use of insecticides and fungicides on crops. The group made a thorough study of Experiment Stations' recommendations. Individuals received additional help and supervision from the instructor in making application of the sprays on his farm crops.

A sample course calendar for the first six months is shown giving units and hours by months. Our course calendar is a four year program in general agriculture. It is the guide used in helping the veteran farmer rehabilitate himself.

Type of Instruction	Hours
<b>January</b>	
1. Setting up the farm record system for 1949.....	4
2. Planning a year-round feeding program.....	2
3. Making plans for home beautification.....	2
<b>February</b>	
1. The control of diseases and insects in truck crops.....	4
2. Home garden.....	2
3. Fertilizing truck crops.....	2
4. Use and care of hand tools.....	4
5. The repair of farm machines.....	4

<b>March</b>	
1. Cultivation of truck crops.....	2
2. Getting started with bees.....	2
3. Care and management of bees.....	2
4. Fertilizing corn and other truck crops.....	2
5. Buying baby chicks.....	2
6. Constructing poultry equipment.....	2
7. Care and use of power tools.....	4
8. Repairing farm machines.....	4
<b>April</b>	
1. Brooding baby chicks.....	2
2. Feeding poultry.....	2
3. Poultry sanitation.....	4
4. Electric welding.....	4
5. Acetylene welding.....	4
<b>May</b>	
1. Improving pastures.....	6
2. Planting cover crops.....	2



Trainee Zajicek constructed this house to suit Florida conditions. Mr. Zajicek is under the supervision of Mr. C. W. Stephens, a veterans instructor in Hardee County.



Trainee examining the 1949-50 crop of fruit in his ten year old citrus grove of Valencia oranges. Mr. H. L. Terzenbach is the instructor in Hardee County.

3. Electric welding.....	2
4. Acetylene welding.....	2
5. Farm machinery repair.....	4
<b>June</b>	
1. Planting young grove.....	4
2. Controlling insects and diseases of citrus.....	4
3. Breeding livestock.....	2

### Productive conferences

(Continued from Page 126)

reached at the summer conferences, the local committees can continue research on the problem throughout the following year. The committee members are all from a localized area easily accessible for meetings.

With the "ground work" for the summer conference being done during the school year, and each member having a definite active part, it is feasible to expect a more profitable summer conference for all. All resolutions should be well founded; less time will be needed at conference for research, leaving more time for final discussion and adoption. This should result in the formation of sound policies. It is conceivable that the summer conference could even be shortened.

The instructors in Washington welcome this experiment and hope that it becomes a permanent policy.



# New Mexico State Conference

PAUL H. JOHNSON, Director Vocational Education, Carlsbad, New Mexico

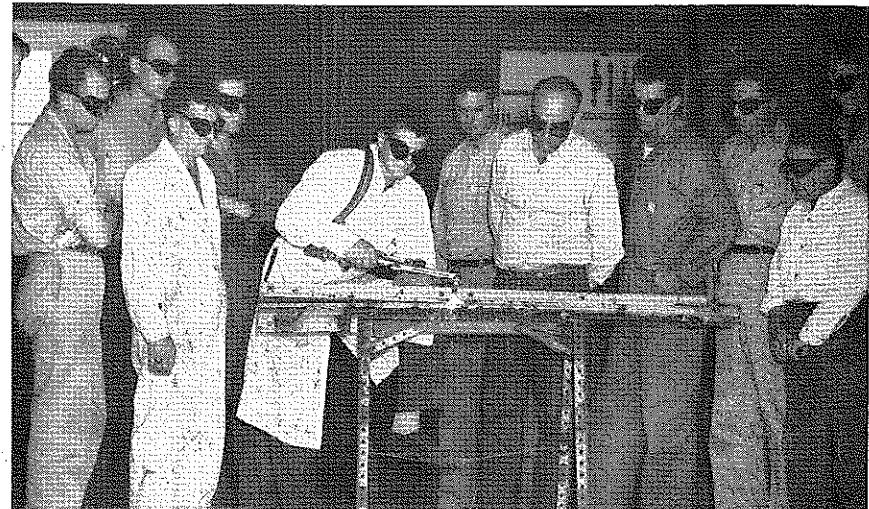
THE Carlsbad department of agriculture, was well prepared for the fifty-two teachers of agriculture, and the twelve instructors representing five tractor companies and three welding companies.

Upon arrival, the fifty-two teachers were divided into two groups. The group working with tractors was subdivided and assigned to one of the five makes of tractors by Mr. Perrin, Assistant State Supervisor, who was in charge of the tractor maintenance section. The different company instructors then took turns explaining and developing one phase of tractor maintenance. The subdivided groups would then carry out the learning step by actually doing the approved practice. This method was used over the ten hour instruction period. The greatest interest getter was the trouble shooting. Each company representative had lots of ideas on how to incapacitate a tractor motor, and it was then up to the ones being instructed to find the trouble and correct it.

The other group, under the direction of Paul H. Johnson, was divided into two sections for arc welding and oxygen acetylene welding.

The arc group was taken to the trades and industrial classroom and shown slide films and a movie on elementary welding procedures. (The films were supplied by the Lincoln Welding Com-

pany.) After having seen the films, the group came back to the farm shop and dividing into three groups, put into practical application the welding techniques on six electric arc welders. The welding machines included two gasoline driven Lincoln DC Machines, two Lincoln AC Machines, two Marquette AC Machines, and two Forney AC Farm Welders. The men worked a full five hour period on developing welding skills.



Cutting Heavy Steel Plate in Demonstration Type of Conference.

The men assigned to oxygen acetylene work began by going to the classroom for a demonstration of the proper method of assembling an oxygen acetylene outfit and a discussion of safety procedures. After the demonstration, the men were each assigned a complete welding unit. The full five hours were spent cutting, brazing, welding, and bending. The following day the welding groups interchanged, so that both groups received both types of welding instruction. The instructors voted for a similar type of conference for 1950 dealing with farm electricity and farming programs.

## Providing special teachers for adults

(Continued from Page 128)

the problems they had encountered relative to the topic to be discussed at the next meeting. Before the next meeting specific data and references adequate to answer all questions were supplied by the regular teacher. During the following week's discussion, one of the members acted as a secretary and recorded the conclusions of the group relative to the solution of the problems. From this record of conclusions, check sheets were prepared by the regular teacher for each class member to indicate those he had in operation, those he hoped to start on his farm and those with which he wished help. This showed the need for on-farm help, and could be used during follow-up work. This was all carried on with the understanding that the twelve special teachers would use the same procedure with adult groups which they would teach during the winter. The school provided enough clerical help so each class could develop similar materials for its class members. Techniques for field trips, demonstrations and other procedures were developed in a similar manner. This method was successful to some degree in helping the special teachers to carry on classroom instruction. However, these farmers were too busy to carry out individual on-farm instruction. Therefore, the local teacher was responsible for the follow-up work. This teacher was involved in a full day schedule teaching vocational agriculture. It is needless to say that the follow-up and individual on-farm instruction he gave

## Share responsibility

(Continued from Page 125)

are helping heart patients to plan and adapt themselves to a post-heart attack tempo of living, their first advice is "get on sleeping terms with your mattress."

*Avoid excessive physical and mental exertion.* Learn to do things the easy way. One of my nurses said to me, "Never do anything standing up that you can do just as well sitting, and never do anything sitting that you can do just as well lying down." Not bad advice, figuratively speaking! Under normal conditions your heart daily pumps nine or ten tons of blood at an average rate of seventy beats a minute. By the time you are forty your heart has beat one and one-half billion times. Avoid situations that make it work harder than necessary.

Heart attacks are like bullets fired at you from ambush as you advance

to better than one hundred and fifty adults enrolled in the twelve classes conducted by the special teachers was superficial and ineffective.

This is one example illustrating how well-trained teachers of vocational agriculture may help to improve the instruction given by special teachers in the field of adult work. It also illustrates that emphasis needs to be put on the selection of special teachers who may give time to the all-important phase of follow-up or on-farm instruction.

It will, undoubtedly, be necessary at this time to use all means at our disposal to prepare the special teachers necessary to fulfill the immediate need in the field of adult education.

along the highway of life. A few are fired and connect while men are still in their early forties. As you advance in years the barrage becomes heavier and the aim more accurate. And neither you nor the doctors know much about where they come from or why you happen to be the victim.

But research is making progress. The U. S. Health Service recently received substantial appropriations to conduct investigations on heart diseases. The American Heart Association is doing a great deal to make the public heart-conscious. The life insurance companies are gathering and releasing significant figures on the disease. Private funds are becoming more and more available for the purpose of heart disease research, a notable example of which is the recently established heart research professorship by Vice-President Alben W. Barkley at the University of Louisville.

Realizing that teachers are a particularly vulnerable occupational group, our first duty is to become informed on the preventive approach to heart trouble. Those who unfortunately fall victim to the disease, if they hope to recover, must adjust to a new tempo of activities that will protect a damaged heart.

Many dynamic individuals have tried to "beat the game." Practically none have succeeded. Yet many who have adjusted patiently and intelligently to their impaired physical condition have lived long, fairly useful and happy lives. Prevent trouble if possible; if not, learn to live with it on its own terms. But let's hammer down those frightening statistics. It can be done.

# Faith in adult education

H. F. ENGELKING, Supervisor, Springfield, Illinois



H. F. Engelking

DURING the last three years as supervisor of agricultural education I have wondered why we do not have more adult education in our high schools, and especially more adult evening school courses for farmers?

One of the major reasons why our public schools are not meeting the objectives of education is that we have been spending billions of dollars for the education of children and pennies for the education of our adults. J. Edgar Hoover, Director of the F. B. I., reports that most cases of juvenile delinquency are due to broken homes and parental delinquency. Educators have long realized the most problem children come from poor home environment. Educators have also realized for a long time that the home in most cases has more influence than the school on the child. Our schools have tried to change the child without changing the parent. This has been ineffective. Our public schools must more and more come to the realization that they have an important job in the field of adult education if educational objectives are to be met and children and adults are to be trained for life adjustment.

Another reason why the objectives of education are not being reached is because our teachers are teaching students to memorize certain facts or figures found in textbooks and very few realize that "learning by doing" is the most effective teaching device known. How many of the schools are teaching such things as citizenship, worthy school membership, worthy use of leisure time, ethical character, training for a job or vocation, or teaching a student to have command of his fundamental processes by DOING? In most cases students are taught about them but not how to do them. We take pride in the fact that the United States is a democracy. Our schools are in many cases run on strictly autocratic basis. Rules, regulations, subject matter, and are determined in many cases by the administrators or teachers without even explaining the reasons for such, without letting the students help work them out. The student council is supposed to be a good example of a workable and doing phase of student government. The vast majority of student councils serve as rubber stamps for the policies that the administrators or teachers want to put into practice. In too many cases our students are taught to memorize the facts and figures rather than to think. How many of our teachers use the problem method of teaching? John Dewey's statement that "genuine learning comes only from experience" is as applicable today as it was yesterday.

Every school's creed should be "Learning by Doing."

We do not believe in adult education because we do not believe that farmers need any further training.

If farmers who have never taken agriculture in high school do not need training in agriculture, how can we justify giving training in agriculture to the boys who are in high school now? Or if a farmer has taken a high school course in agriculture 10 or 20 years ago, are we willing to admit that nothing new in agriculture has taken place in the last ten or twenty years? Farmers need training in agriculture because:

1. A large number of farmers who are now farming have never taken any vocational agriculture in high school.
2. Agriculture has changed a great deal in the past twenty years. As an example, power machinery has replaced horse drawn machinery, new varieties of crops, new kinds of fertilizers, new diseases (and their control) of plants and animals, are just a few of the new things in agriculture in the past 20 years.
3. Education is a continuous process which extends from the cradle to the grave and farmers need organized evening school classes to meet their educational needs and solve their critical problems as they

education for farmers because at one time we taught an adult evening school class and not many farmers came to it and those that did come were not interested in it.

Thomas Edison believed he could make an electric light bulb. He tried and failed. In fact he had to try over 1,000 times before he finally succeeded in making an electric light bulb. Edison did not quit with his first failure but rather profited by the mistakes he made and finally succeeded. The same holds true with your unhappy experiences in conducting adult evening schools. Ask yourself this question—Why did you fail to have a successful adult evening school? I have observed that the following pattern is used by many teachers who conduct successful adult evening schools:

- A. First, use an advisory council in setting up the course of study, helping enroll the members and sponsoring the evening school.
- B. Frequent visitation on the farms of individual farmers before the evening school starts, during the evening school course and after its completion. Individual visitation on the farms of the members results in individual instruction and farmers will begin to regard the agriculture man as the agricultural leader of the community and not just another teacher at the high school.
- C. Base all teaching of adult farmer classes on the "doing" method. (Continued on Page 138)



Adults learn in farmer classes at Paxton, Illinois, Robert Rohlfing, teacher.

## In-service up-grading of teachers of vocational agriculture\*

ORVILLE L. YOUNG, Teacher Education, Illinois State Normal University

### Introduction

If we accept the new concept of education which recognizes education as a lifelong process, then in-service education of the teacher becomes a "must." The four years, or even five years of pre-employment training is not sufficient in itself to produce a successful teacher. This four or five years of pre-service training provides the teacher with only the necessary training to make a beginning in the profession of teaching. The teacher in service must continue to improve himself both technically and professionally if he is to become and remain a successful teacher. This is especially applicable to the teacher of vocational agriculture who needs to keep abreast of the many revolutionary changes in technical agriculture, and to be familiar with the most recent professional developments and to be able to use them.

If teachers of vocational agriculture are to be improved in service, it is evident that the job should be done in the most efficient way possible. The money available from federal, state, and local funds should be used in a manner which will give the greatest improvement in the teaching of vocational agriculture for each dollar spent.

### Purpose of the Study

It was the purpose of this study to attempt to increase the efficiency of the program for the improvement of teachers of vocational agriculture in service by pooling the experience of those who are now directing this work.

### Scope of Study

This study was limited to a survey of the procedures used for the in-service improvement of teachers of vocational agriculture in the continental United States. All the procedures used by the resident teacher-training staffs, itinerant teacher trainers, and the state supervisors of vocational agriculture and their staffs were included. Both the technical and the professional in-service improvement of the teacher were considered.

It was further limited to the land-grant colleges, frequently called "agricultural and mechanical colleges," whose establishment was provided for by the Morrill Act of 1862.

It was still further limited to the in-service improvement of white teachers of vocational agriculture. The teacher trainers in those colleges which train

\*An abstract of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at the Pennsylvania State College, 1948.

Negro teachers of vocational agriculture were not included in the study.

### Procedure

By reviewing the literature in the field of the improvement of teachers in service with special emphasis upon the improvement of teachers of vocational agriculture, a list of the various procedures in use and the variations within given procedures was secured. Using this information, a questionnaire or check list was developed. The check list was sent to the head teacher trainer in each state. These completed check lists, which represent 79 per cent of the states, provided the data for the study.

### Summary of Data

1. The primary purpose of supervisory visits is to help the teacher find and correct his weaknesses. Rating is never considered as a primary purpose and is seldom considered as one of the chief aims of supervisory visits. Although helping the teacher to find and improve his strong points is seldom considered as the primary purpose of supervisory visits, it is frequently given as one of the chief aims.

2. In the opinion of the great majority of supervisors who believe that there is a relationship between the success of the teacher and the frequency of supervisory visits the below-average teacher is visited more frequently than the average or above-average teacher. About a third of the supervisors believe, however, that there is no relationship between the success of the teacher and the frequency of supervisory visits.

3. Supervisory visits, whether made by supervisors or teacher trainers, usually yield the most effective results when: (a) teachers are given the exact or approximate date of a supervisory visit one to ten days in advance, (b) teachers are visited regularly semi-annually or oftener, and at such other times as may be requested by the teacher or the local school administrator, and (c) visits by supervisors are made on Tuesday, Wednesday, or Thursday.

4. A majority of supervisors prefer to arrive at the school from a supervisory visit before classes begin. About a third of them, however, have no preference and arrive at any time that is convenient for the supervisor.

5. A visit lasting a half day or all day is the most common practice regardless of the number of teachers employed in a state. Supervisory visits rarely last only one class period or less.

6. The best procedures for supervisors to follow in making supervisory visits are: (a) to visit supervised farm-

work with the teacher and observe classroom recitation or discussion of farm crops and/or livestock, (b) not to correct the teacher before his class or ask the teacher for permission to talk to the class, and (c) to report the findings of a supervisory visit to both the teacher and the principal by means of a verbal report and/or a letter.

7. Teachers will be encouraged to attend summer school if: (a) summer-session courses for teachers are three to six weeks in length, (b) graduate credit is given for all summer-session courses except the regular undergraduate courses, and (c) teachers are allowed full pay while attending the regular summer-session courses for teachers of vocational agriculture.

8. The effectiveness of the teacher in presenting technical subject matter can be improved by: (a) offering one-day or two-day non-credit courses when a group of five or more teachers request them, (b) acquainting teachers with the findings of research within their state as early as feasible after the research has been completed, (c) offering more graduate summer-session courses in technical subject matter which will meet the needs of teachers of vocational agriculture, (d) sending regularly to all teachers in a state, a state magazine or news letter which contains both technical and professional material pertinent to that state, (e) encouraging the teacher to read the *Agricultural Education* magazine regularly, and (f) providing a subject-matter specialist in the department of agricultural education.

9. Teachers have a part in the planning of state and district conferences in most states. In about half of the states teachers, through their elected representatives, have a part in the formulation of policies.

10. Some sort of instrument is usually provided for the teacher to use in self-evaluation.

11. Teacher trainers and supervisors receive excellent cooperation from the technical departments in the colleges of agriculture in conducting special conferences on technical subject matter. Cooperation from these departments in using approved methods of presenting subject matter to teachers could be improved upon, however.

12. The procedures which may be used in the improvement of teachers of vocational agriculture listed according to their effectiveness are: (a) supervisory visits—by supervisors or teacher trainers, (b) conferences, (c) courses on campus, (d) courses off campus, (e) teaching aids, (f) literature, and (g) self-evaluation.

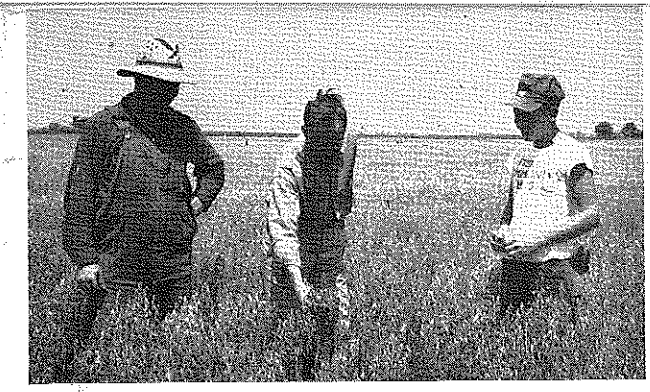
13. There was a question placed at the end of the check list which read: Please list any procedures which are not used in your state but which you believe would be effective aids in in-service up-grading of teachers. More than half of the respondents to this question offered suggestions which were relative to means of improving the teachers' knowledge and use of technical subject matter.

### Suggestions

In consideration of the data gathered concerning present practice, as related (Continued on Page 143)



Mr. Carroll Hoover, a student teacher at Princeton, Illinois, instructs boys in collecting soil samples as one phase of their improvement project in soils.



Mr. Marshall Scott, teacher of vocational agriculture at Fisher, Illinois, one of his pupils, and the pupil's father evaluate the boy's oat enterprise. Photos from G. P. Deyoe, Illinois.

## Creating interest in farming programs—Part II\*

LLOYD J. PHIPPS, Teacher Education, Illinois

THE third section of the study was designed to discover the factors which contributed to the obtaining of successful farming programs in selected departments of vocational agriculture. The first problem was the selection of departments for intensive study. No attempt was made to select departments with the best farming programs. The following factors were considered in the final selection:

1. Average income per boy from farming programs
2. Section of the state in which a department was located
3. Teacher's years of tenure at present location
4. Total years of experience of teacher
5. Rating of supervised farming programs by supervisors representing State Board of Vocational Education
6. Average number of supervisory visits to each boy in the department
7. Participation in Future Farmer of America Chapter contest
8. Participation of pupils in the sectional fair
9. Number of State and American Farmers during past three years
10. Rating of supervised farming programs by teacher trainers

A minimum of one day was spent in each of eleven schools selected. The teacher of vocational agriculture and his pupils were interviewed at each school. The pupils were interviewed in an attempt to obtain in the opinions of the boys as to what were contributing factors responsible for the development of their present farming programs. The instructors were interviewed to obtain, in their opinion, the factors which contributed most toward the development of the present supervised farming programs which their pupils were conducting.

\*In the previous issue of *Agricultural Education Magazine*, Part I presented certain facts regarding procedures used to encourage the development of broad farming programs.

*Opinions of pupils.* In the eleven schools visited, an average of four boys in each school or a total of forty-four boys were interviewed. In selecting the boys an attempt was made to obtain from all classes in agriculture in each school boys who in the opinion of the instructors had good farming programs.

The boys were asked to think back and try to analyze what motivated them to develop farming programs which at their school were considered good.

The following factors seemed to be the most important in motivating the development of a good farming program as shown by the frequency of mention and intensity of feeling:

1. Cooperation of parents
2. Experience with supervised farming program by older brother or relative
3. Opportunity to farm
4. Future Farmers of America program
5. Tradition in department of community
6. Classroom discussion of farming programs

The boys indicated that the following were important in obtaining cooperation of parents:

1. Farm visits by the instructor
2. Banquets
3. Adult classes
4. Parents' meetings
5. Future Farmers of America activities

*Opinions of instructors.* One of the questions asked the eleven teachers interviewed concerned the procedures which the instructor believed were valuable in motivating the developing of good farming programs. The interviewer attempted not to provide leads in an attempt to obtain a true indication of the procedures which the instructors emphasized most. Following is a list of the different procedures which were considered of primary importance by over half of the persons interviewed.

1. Spend a considerable amount of time on the farm with the parent.

Cooperation of parents is highly important and should be actively sought.

2. Sponsor parents' nights to explain the concepts of supervised farming programs.
3. Emphasize partnership projects.
4. Content of classroom instruction should be so organized that a pupil can and is expected to practice what he learns in his farming program. A check on practices adopted should be made at frequent intervals.
5. Many extra records such as number of pigs born, date vaccinated, weight at birth, weight at weaning, and rate of gain should be kept and placed on the bulletin board or blackboard.

The total number of procedures emphasized by the eleven instructors, the ones listed being only those most frequently mentioned, indicated there is probably more than one way of promoting good farming programs. The procedures emphasized by an instructor should depend upon his personality and the community in which he works. It should be pointed out that the procedures used and considered important by the instructors and the facts mentioned by the boys were almost identical. Students did mention some other factors such as tradition and opportunity to farm which were not mentioned specifically by the instructors, but which were usually implied in some of their answers.

### SUMMARY

In summarizing the data obtained, the necessity of a complete and thorough understanding by pupils and parents of what the purposes of a broad farming program are seems to be of primary importance in obtaining such programs. Pupils and parents need to have a complete and thorough understanding of what is a farming program, how it is developed, what is the value of the farming program to a boy, and how it can be improved. The importance of a complete and thorough understanding of the concepts of farming programs is shown by the results of the survey in which a high value was placed on such items as (1) discussion of what is a farming program, (2) tours to see farming programs of older boys, and (3) use

(Continued on Page 138)



The human element in farming  
(Continued from Page 123)  
revamped. The pattern of present programs may be reshaped in light of the facts.

Farther than this, such an approach will reveal the needs for overall local planning for vocational education including vocational agriculture. Such local planning would, of course, be based on objective facts and trends in the situation and in cooperation with all education forces concerned. Such cooperative planning should be going on in every school, every county, and in every supervisory district to the end that vocational adjustment opportunities will be available to all farm youth and young farmers. Vocational agriculture must be supplemented by other units looking towards better vocational adjustment of all farm youth.

#### Problems of Farm Placement

Of course, our prime responsibility in vocational agriculture is to see to it that farm boys and young men, who have made farming their vocational choice, are becoming progressively established in farming. This responsibility should be ours whether or not the individual concerned has attended high school classes in agriculture. Here again, the total picture of the farm youth adjustment problem forces emphasis on at least two aspects of the farm placement problem:

1. How may you work out in your community district, or state a partnership agreement within a family setting whereby a young man can confidently enter into it on an acceptable and legal basis? There are opportunities here that have as yet scarcely been touched. Yet there is a definite and urgent need for such partnership agreements both to provide placement opportunities for young farmers and at the same time protect them, their parents, and their families.

2. How may you keep reliable up-to-date information on farm placement opportunities for the use of your boys and young men at all times? The Veterans Farm Training Program reveals that we have been remiss in dealing with this whole problem of placement.

#### All Share In Responsibility

Now I have raised some large and to me challenging issues with the human element in farming as bases for professional improvement. Educational supervision and administration consists largely of one generation of educators aiding the on-coming generation to recognize the problems of today and stimulating them to want to do something about these problems as they move into positions of responsibility for the future. The processes by which these problems, both technical, professional, and human, are studied and solved are the processes of professional improvement and growth.

It is a big job. No one has adequately tackled it. It will bear much fruit in better programs of vocational agriculture, and in better programs of vocational education.

Remember the education principle: *Your personal growth comes from your own activity.* —John T. Wheeler,  
Teacher of Education

University of Georgia

## Farming Programs

C. L. ANGERER

### A lesson in diplomacy

BEN BRISTOL, Graduate Assistant, Oklahoma A and M College



Ben Bristol

"I WONT allow a pig on my farm. They are too filthy and dirty." This quotation is taken directly from a farmer's statement to a local instructor on the teacher's first visit to the farm.

In spite of this beginning attitude, the farmer's son now has one of the outstanding herds of registered Hampshire hogs in that section of the country. The boy and the teacher also have the full cooperation of the dad in the future herd development plans.

Instructors faced with similar problems of enlisting adult cooperation may be interested to know the methods used in this case.

To begin with, at no time during the discussions that followed did the boy's teacher argue with the ideas projected by the farmer. He fully admitted that the way hogs were handled on many farms did cause the hog enterprise to fit the "filthy and dirty" description. He further pointed out that this did not necessarily have to be true.

There was one farm in a nearby community where proper swine management practices were being followed. The instructor urged the boy and his dad to visit this farm.

The boy was told how swine could be worked into the farming program to the best advantage, and his responsibility in handling the enterprise in such a way that the venture might be acceptable to his father. At no time were the ideas of the dad belittled. The boy was given the impression that his dad had some excellent reasons for his attitude, which was naturally true.

Father and son visited the registered hog farm in the neighboring community, without the instructor of vocational agriculture. Both were impressed by what they saw. In fact, they ended the trip by buying a registered bred sow, of the type suggested by the teacher.

The boy followed exactly the plan of operations worked out previously with his teacher, and was fortunate enough to raise a ton litter from the sow on his first attempt.

In the meantime, the registered hog breeder who had sold the sow was visited by the instructor and told of the advertising possibilities of the set-up as it was developing. The result was that the boy was given a registered Hamp-

shire boar for his achievement. The breeder, the boy, the dad, and the teacher all came in for some newspaper and magazine publicity.

After this successful beginning, the boy's dad was completely sold on the swine enterprise which had fitted into his farming program so well.

It is important that each boy in vocational agriculture have an adequate supervised farming program. This necessitates his using the home farm for a "laboratory." The dad's cooperation then becomes a vital essential.

The farmer cannot be expected to disrupt his whole farming operation to provide this facility, and in most instances would not consider doing so. Sometimes, as cited in the example, the dad is against a logical program for his boy at first, even when it might readily fit into his farming operations.

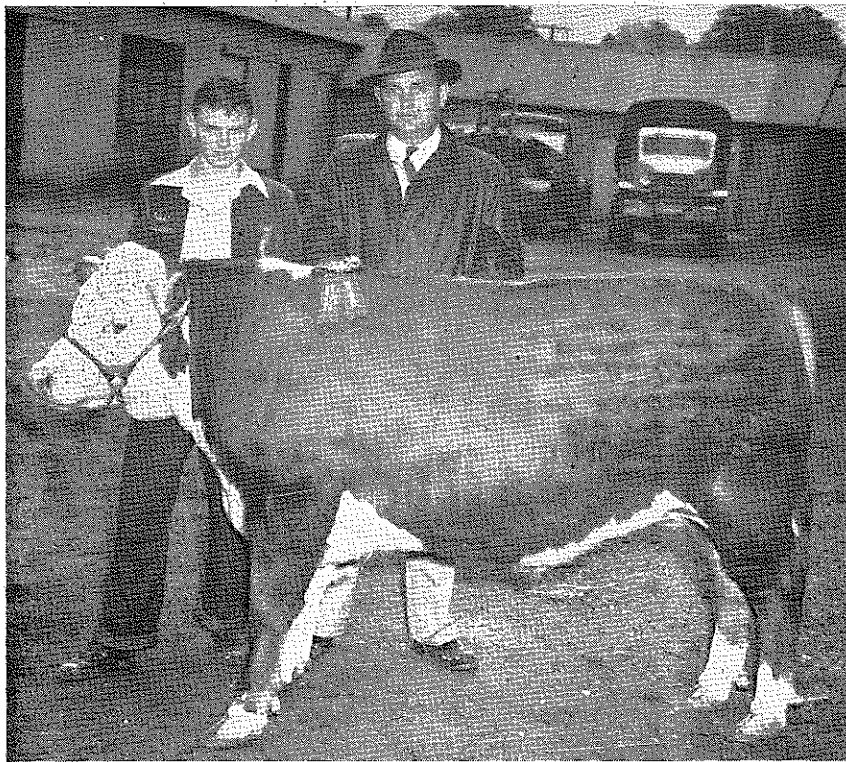
It then becomes imperative that the instructor do a diplomatic job of selling the program. It has been suggested by some that the mother can be a great help in this regard. She can be of material assistance indirectly and passively, but some women are liable to make a direct issue of the problem with somewhat undesirable results.

It has been the writer's experience that little can be accomplished if the dad feels that his agreement has been a result of too much pressure or duress.

On the other hand, some dads do not cooperate because they do not fully understand where they fit into the program of vocational agriculture, and the supervised farming program each student is expected to adopt. It is the instructor's duty to keep the farmer informed of the purposes, aims, and objectives of the boy's supervised farming program in particular. It is also important that the dad be informed of the rest of the program.

The teacher should visit the boy and his parent often enough to do an adequate job of supervising. Once a month is not too often. Much good can also be accomplished by the instructor's taking a judicious interest in the complete operations in effect on the farm. A certain amount of praise for things being done well should precede any suggestions for future improvement in most cases.

By working together the parent and teacher can be of maximum assistance to the student of agriculture. With their guidance and advice, the boy can develop the best supervised farming program possible for him. The dad will get more satisfaction from his son's successes, and the teacher of vocational agriculture can point with pride to a job well done.



Well supervised farming programs return dividends.

### Supervising farming programs

H. R. CULVER, Assistant Supervisor, Alabama



H. R. Culver

TEACHERS of vocational agriculture might well ask themselves these questions:

1. Do I have a well-planned and definite system to follow in supervising the farming programs of my all-day students?

2. How often have I gotten into my car for project

visitation and not known whom I was going to see?

3. How many times have I started to visit a boy and not known definitely why I was visiting him?

4. Do I visit my students who have good farming programs and more or less forget those with weaker programs?

5. Do I make any definite plans with a student when I visit him or do I just go by to pass the time of day?

6. Do I make any written report of my visits to supervised farming programs, and do I leave a copy of these plans with the boy?

The supervision of farming programs of all-day students is probably the weakest phase of our program in vocational agriculture.

Teachers have encountered many difficulties in supervising the farm programs of their all-day boys. These might be (1) inability to find boys at home, (2) boys at work in the fields some distance from the house, (3) records carelessly and incorrectly kept, (4) boys

lax with record keeping, (5) lack of time on the part of the teacher to do adequate supervision, (6) inability to get boy and parent together to discuss plans for the future.

If supervision is to be done systematically, certain preparations are necessary before visiting actually begins.

#### Planned Visits

A skeleton schedule for visitation should be drafted. The teacher should prepare and mimeograph a supply of forms for his use in making written plans while visiting boys. Soon after school opens each student of vocational agriculture should determine or revise his long-time and annual farming programs. Early in the year the teacher's supervision notebook should be made up.

The following records of each boy should be kept in the teacher's supervision notebook (1) long-time and annual farming programs, (2) project records, (3) project agreements and (4) written project plans made by the teacher while on visits.

With these preliminary plans made for project supervision certain other plans should be made before leaving for actual visits to the boys' farms. In most instances each boy should be notified as to the specific date he will be visited in order that he and his parents will be at home. The weekly visitation schedule should be posted on the bulletin board at least one week in advance of visits. Before leaving the vocational building for project visits, the farming program of each boy to be visited that day should be reviewed by the teacher. The project plans made

on the teacher's previous visit should also be reviewed.

Thorough planning while on a visit is of vital importance. The boys' projects should be examined, mental notes of other farm needs should be made, certain skills and techniques should be taught and project records checked. The boy should be encouraged and inspired during the visit. In most cases it is desirable that written plans be made, leaving a copy of these plans with the boy.

Each student of vocational agriculture should be visited at least three times during the year. However, some students need more frequent visits than others.

#### Purposes of Supervisory Visits

The teacher should know the crops and livestock grown on the farm. He knows the facilities for production and the first visit should be for the purpose of planning a farm program that will fit the needs of the family and the student.

No supervised farming program is complete without bringing the parents into the planning. On supervisory visits the teacher has an opportunity to meet and talk with the parents and gain their confidence. It is unwise to try to plan a supervised farming program without bringing the parents in on the planning. They can be of great help. This would definitely be one of the purposes in making a supervisory visit.

A teacher can never cover all the things in the classroom that he wishes his students to know. This makes it necessary that the students be shown by field trips, demonstrations or by individual instruction on the supervisory visit. There are many jobs the teacher can help with or supervise when he is visiting the farming program. This also teaches the parent the new techniques in doing a job. A visit should not be too long but should certainly be long enough to fulfill immediate needs.

#### Opportunity for Evaluation

Furthermore, on these visits a teacher is more able to see progress than a daily observer of the farming program. When problems are observed by the teacher making these visits they should be brought to the attention of the student and definite plans made for solving them.

Supervisory visits give the teacher an opportunity to see how well a student is putting new ideas and suggestions into practice. Do not let students get the idea that you are checking just for your benefit. While visiting a student it is also a good practice to check his set of records and see if he is up to date and if a good form is being followed.

Many teachers make supervisory visits when they do not have anything particular to do. Certainly no teacher should make a visit if he does not have something definite in mind before he makes the visit. The need for a visit should justify the time and expense. The visit should be planned so the maximum of service can be rendered in the minimum amount of time.

## Creating interest in farming programs

(Continued from Page 135)

of older boys to discuss farming programs with beginners.

If the parents are to learn the purposes of a broadened farming program, it is necessary to first enlist their aid and cooperation. In the survey the development of friendly relationships with parents received number one ranking in value as an activity to engage in during a farm visit. Home farm visits also received a very high rating as an administrative procedure. Pupils mentioned several times the value of cooperation and help from parents, and the instructors interviewed also emphasized the necessity of spending a great deal of time with parents. Developing rapport with parents and helping them understand the values of good farming programs cannot be done too quickly after it is known that a boy is going to be enrolled in vocational agriculture.

There seems to be general agreement by the pupils and instructors interviewed of the advisability of making the farming program the *hub* of the total vocational agriculture program for high school boys.

The emphasis on summer activities connected with farming programs indicated the advisability of using farming programs as the *hub* of the program the year around instead of only during the school year. It may be that some instructors are having trouble in developing broad farming programs because they neglect such activities as record keeping, learning of skills, cow testing, and sow testing during the summer months.

The developing of tangible evidence of the existence of the less conspicuous aspects of the farming programs such as improvement projects, learning of skills, and adoption of approved practices seems to be necessary. Many times pupils have better farming programs than is first apparent and would have still better programs if they had some way of measuring their progress with improvement projects and supplementary farm practices. The high value rating of plans, cumulative records of skills learned, and lists of approved practices adopted are a few procedures which instructors have developed for providing recognition and evaluation of progress with the less tangible aspects of a broad farming program.

The study indicates that if farming programs are to be broad and serve the purpose intended, we must have a unified program of vocational agriculture. We cannot have three or more programs with one being the classroom program, the other the Future Farmers of America program, and the third the program which is carried out on the farm. These must all be interrelated with the farming program as the *hub* which ties all the other aspects into an integrated program.

The development of a broad farming program may be based more than we sometimes realize on the opportunity to farm or the likelihood that a boy will farm after he completes high school. This factor was emphasized by some of

the replies of pupils interviewed. They said that their farming programs were broad because they had an opportunity upon graduation to farm and were preparing for this opportunity.

The importance of the opportunity to farm, or lack of it, forces the instructor who expects to develop broad farming programs to (1) make a study of his community to discover opportunities for farming, (2) counsel, guide, and recruit pupils on the basis of apparent opportunities for farming, (3) emphasize guidance in the total program of vocational agriculture, and (4) become active in helping and guiding toward placement.

It should be noted that procedures, activities, and administrative methods which were rated most successful are those which contribute most to the urgent needs of boys growing up in our present day culture. They contribute to such basic needs as:

1. The need to obtain adult status
2. The need to gain acceptance of peers
3. The need for new experiences
4. The need for security
5. The need for recognition

Discussion of opportunities for profit in farming programs, for example, gives the pupil insight into one of the ways he can achieve adult status financially. To achieve adult financial status is a basic need of adolescents in our present day society.

Instructors wishing to make use of the data presented in this study should first study their communities and their pupils to discover the most pressing needs. A selection of those procedures can be made which contribute to the needs of the pupils and community with some consideration being given to success of others with the procedures. The rating of others as to the value of a procedure, however, is only an indication of its possible value and should not be used as the final criterion.

## Techniques for planning conferences

(Continued from Page 126)

the evaluation sheets is discussed at this final meeting.

### One Day Teacher-Training Meetings

A second type of meeting for teachers in-service has been developed more recently in Michigan. They are designed to provide specific helps in subject matter, and methods for teachers with similar problems. Usually the group includes the teachers in one or more counties as well as the Extension Service workers in the same area. The agenda for such meetings are planned by a teacher trainer and the teachers. The teacher trainer determines the exact nature of the needs of the teachers and requests the assistance of the Extension Service in conducting the meeting on specific topics. In this way the discussion is centered on the specific problems of the teachers involved.

The meetings include technical materials in agriculture as well as methods of teaching the subject matter in classes of vocational agriculture. Because such

## Faith in adult education

(Continued from Page 133)

"Learning by Doing" is not just a phrase, it is a "must" if you are to have a successful adult evening school. Some examples of "doing" courses which teachers have used successfully with their adult evening school courses are as follows:

1. Teaching a welding course in which farmers actually weld some broken parts of various farm machines.
2. Have farmers collect their own soil samples and test their own soil for available limestone, phosphorus and potash.
3. Teach various farm skills such as:
  - a. electric wiring by having members actually wire a house or barn.
  - b. have members actually lay out contour lines and plow and plant on the contour.
  - c. demonstrations by individual farmers or groups of farmers in various farm skills or jobs in which they have been successful.
  - d. if some of the members have been particularly successful in such phases of farming as cattle feeding, swine improvement, etc. recognize their ability by using them as panel members or discussion leaders.

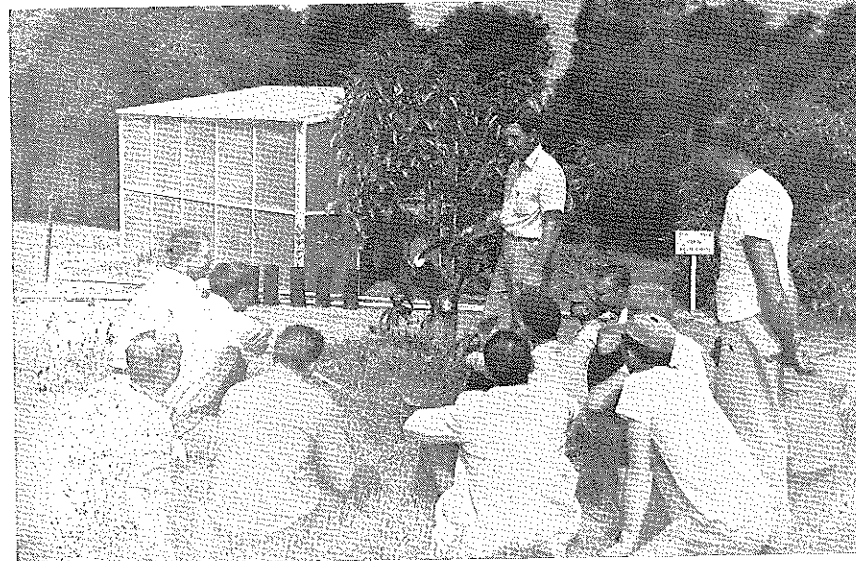
Perhaps we do not have more adult farmer classes because we are overloaded with high school work. My experiences with cases such as these leads me to believe that if a teacher will develop a sound program of adult education he will find that his Board of Education and/or principal will reduce his high school load. Henry Ford did not wait for cement roads to build his cars. He built the cars and cement roads were built for the cars to run on. Develop a sound program of adult education and you will be given time to carry on an expanding program of adult education.

Last summer a very successful teacher of vocational agriculture made this statement to me, "It is essential that I have a strong adult evening school program. I learn a lot from the farmers and I am a better teacher of my high school boys because of my teaching adult farmers."

meetings are provided teachers are able to keep their courses up-to-date, which is very important in working with adult farmers and veterans.

Usually each group of teachers requests three to five of these meetings each year. In some cases the entire series will be in one area such as farm management; in other cases the meetings will be unrelated. In some cases the meetings cover only professional problems; but in every case, teachers have had a chance to determine the problem areas to be covered in such meetings.

# FELLOWSHIP



Teachers seek latest on sub-tropical fruit production.

## Teachers keep posted

SOME thirty instructors of vocational agriculture from Southern California high schools and junior colleges gathered for an advanced study week in citrus and avocado production at the Voorhis Unit of the California State Polytechnic College in San Dimas the first week in August. The program attracted teachers from all southern counties in the State and some from as far north as Fresno.

Prior to the conference a questionnaire was sent to teachers of agriculture so that they might indicate their preferences as to subject matter to be covered. From a study of the returns of this survey, Mr. A. E. Canham and G. T. Moran, both members of the California State Polytechnic College faculty, were able to design the course around those problems most frequently met in high school citrus and avocado courses.

A major portion of the week was devoted to actual grove demonstrations and field trips to citrus and avocado production areas, commercial fertilization test plots and demonstration irrigation areas. The week long course also covered discussions and demonstrations of soils and their adaptability and the latest methods and trends in fertilization practices for sub-tropicals. Local soil problems were investigated with relation to pH, base exchange, soil amendments and their uses and soil and plant tissue analysis interpretation also were given intensive study.

The major aspects of pest control as related to citrus and avocados were examined and certain controls recommended. Practices and materials used for weed control including their application to non-cultivation were demonstrated.



E. B. Knight

## Expectations

WHAT can communities, schools, parents and students expect from these departments of vocational agriculture?

In the first place, they can expect to find the instructor to be a farm reared agricultural college trained man of high character with habits of work developed through life on the farm. These men are real Americans and those concerned can expect a vital Americanism to be taught in vocational agricultural classes for the development of free-thinking, well-nurtured farm youth. Parents can expect that these men will be the type of men that their sons can associate with and expect to learn in school and find out the kind of lessons that will make them better farmers and better citizens.

The school and community can expect to find the instructor in agriculture an ambassador of good will taking the school into the community and bringing the parents as well as the pupils into the school. To a large extent, he represents the school in the rural territory surrounding it and can be expected to aid farm youth in their problems and to help the other teachers to a better understanding of the conditions

## Our cover

THE cover photo is by Russell Bates, Director, Owasso, Michigan Camera Club. It shows a committee of the F.F.A. chapter planning a fire lane for the school forest as well as the follow-up of planning. Paul Sweany arranged for the loan of the photograph. Teachers of agriculture in Owasso are Duane Dalgleish and Jack Prescott.

## Howard named state schools head



D. J. Howard

DOWELL J. HOWARD has been appointed acting State superintendent of public instruction in Virginia. Mr. Howard is a former instructor of vocational agriculture, district supervisor, assistant State supervisor and State supervisor of agricultural education.

For many years he has been a leader in the Future Farmers of America. He holds honorary State Farmer and American Farmer degrees, is a member of the National Advisory Council, Board of Trustees and National Treasurer of Future Farmers of America.

## Exchange of classes

JUST what is a complete curriculum in vocational agriculture? Can all the knowledge a boy needs for farming be included in a four-year curriculum? These are among the problems teachers of vocational agriculture ask themselves each year as they revise their teaching layouts. This past year I consulted with the teacher of home economics and suggested we schedule an exchange of classes for two weeks. Instructors of vocational agriculture try to interest boys in some subjects which they will leave to their prospective wives in later years. Well, why not teach these subjects to girls? Eventually the girls will assume responsibilities having to do with such activities as gardening and managing the poultry flock.

It has been my experience that girls benefit from well-planned field trips as much as do boys. A trip to a local hatchery or to a farm where chicks are being brooded by approved methods appeals to them. In connection with the gardening unit, trips may be taken to observe a good garden, fruit plantings, a hot bed or cold frame, and a two or three-acre garden system.

Byron Beckner, Teacher  
Pilot Grove, Missouri

affecting the school life of farm boys and girls.

Parents, students and others can expect to find the instructor in agriculture with a belief in the future of farming.

L. M. Sasman,  
Supervisor, Wisconsin



## Future Farmers of America

H. N. HANSUCKER

### Future Farmer Federations

W. R. CARTER, District Supervisor, Walterboro, South Carolina



W. R. Carter

FOR a number of years teachers have felt the need of an organization to function between the local F.F.A. chapter and the State F.F.A. Association composed of 225 chapters. This new organization would be large enough to carry on desired activities but small

enough to function on a group basis.

In the fall of 1947 the plan for this type organization was formulated by teachers of agriculture with the help of R. D. Anderson, state supervisor of vocational agriculture. Each district held a meeting of its county chairmen of teachers and this group decided that federations would be formed according to the geographical location of the chapters. Twenty-six federations, varying from seven to thirteen chapters each, were formed with the teachers electing the chairman of each group.

The next step was for the teachers to explain to the local chapters the plan for the organization and to secure their participation. Each chapter selected two representatives to attend a district meeting at which time plans for the federation were explained and presented to the representatives. These boys and teachers discussed the possibilities of the organization and then formulated more definite plans.

Each federation proceeded to draw up its own constitution and by-laws keeping in mind the local and state chapter constitutions and by-laws. A committee was appointed to present these at the next called meeting.

It was decided by the federations to have officers come from different chapters and several plans in electing officers were used. Some schools drew numbers for certain officers. In some groups outstanding boys were nominated with the idea that officers would rotate from school to school each year. After this, committees were appointed to plan a program of work in line with that advised by the local chapters and state association.

Most federations meet monthly with one or two delegates from each school attending. The officers use the official opening and closing ceremonies. Local teachers attend these meetings but only one is the official F.F.A. adviser. The meetings are usually held at a different school each time with all the members of the host chapter attending and later serving sandwiches, chicken suppers, or having oyster and wicner roasts.

Some of the accomplishments made possible through the federations are as follows:

1. Conducting contests to select teams for district contests. These include, judging, public speaking, forestry, and pasture improvement.
2. Training and developing F.F.A. candidates for state office.
3. Raising money to send one or two members to the national F.F.A. convention.
4. Promoting athletic contests among chapters such as basketball, soft ball, and boxing.
5. Having a father and son banquet together to secure more outstanding speakers and better entertainment. Visitors are also better able to see the scope of the F.F.A. program.
6. Attending camp. A large number of schools attending camp from one area lessens the transportation problem and makes for a better spirit of competition.
7. Better supervision of the fifty purebred Hereford bulls given to the state association by the Sears Roebuck Foundation.
8. Printing a federation magazine.
9. Accepting the responsibility of getting two delegates from each chapter to the state F.F.A. convention.
10. Co-operative purchasing of seed, and supplies, not available locally.
11. Putting on exhibits at county and state fairs.

## Practice in working together

ELLIOTT H. JOHNSON, Adviser,  
Phelps, New York

THE dictionary defines "cooperative" as "wanting or willing to work together with others." What better activity can our F.F.A. members practice day by day? What other activity is going to help the members more in later life?

All of our F.F.A. chapters include "Cooperative Activities" in their program of work, each year, with goals set and ways and means of attainment listed. We must look at the actual accomplishments at the end of the year, however, before we can evaluate the effectiveness of this activity. Chapter executive committees and program of work committees have no trouble in listing many types of cooperative activities. A few activities well done, however, are more effective than many which are not completed.

The most important cooperative activity of the chapter is that of member cooperation within the chapter. Few chapters are able to progress unless the officers carry on, along with all the members, a truly cooperative program. Suppose we look in on a regular business meeting of the F.F.A. chapter. Are committees and others appointed at previous meetings ready with their reports, when the president calls for them? If not, members are not all doing their part. If all members are carrying out their responsibilities, however, we have cooperation at its best.

There are other activities which will promote member cooperation. The purchase of seed and livestock has been one of the best ways of getting member cooperation when practiced on a chapter basis. There is not only a saving involved but by having members work together on the planning and pur-



F.F.A. federation members cooperate in buying gifts.

chase, fellowship, and common understanding are fact and not fiction. Formation of a sow testing program, a dairy herd improvement unit, an artificial breeding unit, are all excellent ways of improving member cooperation.

Chapter or school fairs are never successful without the complete support of all members. The building of livestock pens, staking out exhibit areas, promotion, preparing the premium book, securing judges, providing refreshments, arranging for entertainment, and many other activities are a test of cooperative effort. At the county or state fair, chapter exhibits are an important activity. Such exhibits require the combined efforts of a number of members.

Many chapters find that fund raising activities are one of the most important projects to be undertaken each year. Much of the chapter's program of work requires some financial support to be a success. Cooperative effort on the part of each and every member is the answer. Usually the increase in the size of the treasury is in direct proportion to the number of members actively helping.

Member cooperation within the chapter is not the only essential in a sound cooperative program for F.F.A. members. Many chapters find that cooperation should include joint activities with other clubs and organizations in the schools. These activities might be recreational in nature at the beginning. Such things as dances, parties, joint assembly programs, sports and many other types of activities promote good will and fellowship among members in all the organizations. The F.F.A. county group is an excellent means of promoting good will and cooperation between chapters and chapter members. Sports of all types, judging contests, exchange of degree teams, joint camping trips, and other similar events broaden member understanding and the ability to get along with others as nothing else will.

The third type of cooperative activity

is that of cooperation with organizations in the community and elsewhere. This type of activity is excellent because it brings members in contact with adult groups. Where is there a better opportunity to become acquainted with co-operatives? Where is there a better opportunity to become acquainted with business groups, other farm organizations, and even state and national organizations? The Phelps Chapter members, for example, have had such diverse cooperative activities as parking cars for the annual County Farm Bureau meeting, conducting a scrap metal sur-

vey for the State Conference Board of Farm organizations, running a seed trial for the Cooperative Grange League Federation, presenting a program at the Rotary Club and at the local Grange and cooperating with several farm organizations in running surveys.

Cooperative activity, then, should become one of the most important of all our chapter activities. What would do more for global understanding today than a world wide organization of farm youth, such as the Future Farmers of America, with cooperation the keystone of their Programs of Work?

## Teachers work with businessmen

W. C. DUDLEY, Area Supervisor, Appomattox, Virginia

A GROUP of bankers and other businessmen anxious to further strengthen the farming in the area surrounding Danville with the teachers of vocational agriculture in Pittsylvania County planned together for the development of a Vocational Agriculture Junior Livestock Association. The city of Danville, Virginia which has long been noted for its interest in better city-county relationships is the major market for Pittsylvania County. Vocational agriculture is taught in eight White high schools in the county with departments located at Brosville, Callands, Climax, Dan River, Gretna, Renan, Spring Garden and Whitmell. Vocational agriculture is also taught in the Negro Northside and Southside Training Schools. Each department of vocational agriculture offers veterans' training in agriculture, as well as the regular program of vocational agriculture. The White teachers of agriculture direct the Pittsylvania County F.F.A. Federation, and it was at a meeting of this group that the need for improving the enterprise of dairying was first discussed. Mr. J. P. Pullen, teacher at Whitmell, was appointed to meet with representatives of business concerns in Danville

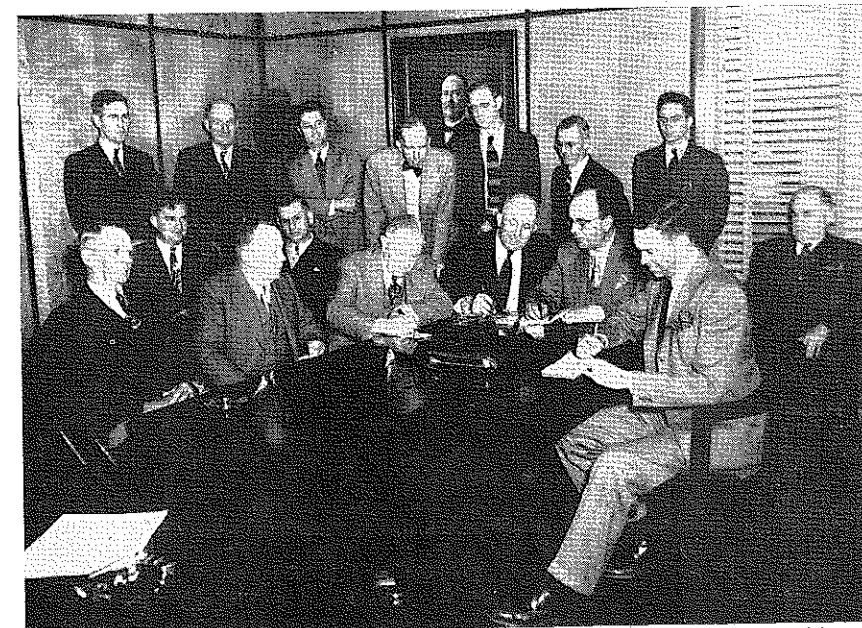
to determine how the problem could best be solved.

The president of every bank in the city and a number of other business concerns attended the meeting. "Know how" on financial matters was plentiful among this group of outstanding business people. Mr. Pullen had hardly finished his presentation of the need before a suggestion was made that a foundation be established to increase the number of purebred heifers on farms in Pittsylvania County.

### Memberships Planned

It was also decided that business concerns joining the foundation would contribute in units of \$100, the approximate price of one heifer. Heifers were to be awarded to F.F.A. members and veteran trainees who are attempting to become established in dairying and were conducting an outstanding program of supervised practice. The student agrees to return to the foundation the first heifer calf produced or pay the purchase price of the animal. Businessmen in Danville were quick to see the possibilities of the foundation which by now had adopted the name Pittsylvania County Vocational Agriculture Junior Livestock Association. Enough memberships of business concerns were enrolled at the first meeting to provide two calves for each department of vocational agriculture in the county, and it seems that there will be no question about the financial success of the association. Regular meetings of the association are held and a constitution and by-laws have been adopted. The association is incorporated under the laws of the State of Virginia.

Each business concern belonging to the association "adopts" an F.F.A. member or veteran who is raising an association heifer during the year. The spirit of the association can best be summed up by the statement of the president of one of the largest banks in Danville during the last meeting of the association. He looked at his watch several times toward the end of the meeting and finally said: "Mr. Chairman, I move that we postpone the other items of business, because I want to run out to the farm and visit the boy whom our bank is sponsoring!"



Directors of the Pittsylvania County Vocational Agriculture Junior Livestock Association attend a quarterly meeting of the association.



The Education Committee gets organized.

## F.F.A. committee work clicks

OLEN C. MARKWELL, Adviser, Hayward, California

THE F.F.A. is one of the most effective teaching devices ever discovered. Its effectiveness as a teaching device is natural and fundamental, springing from sources deep and enduring.

While a true general statement of the aim and purposes of the F.F.A. as an effective teaching device adds up to something highly desirable, still to translate those ideas into the kind of action which gives concrete and noteworthy results is something else again.

Now it should be clearly understood that Hayward does not regard itself a model chapter. It is not to be assumed that another locality could take the same organization and get the same results. We simply believe that our chapter has a set-up tailored to meet our conditions. In-so-far as local conditions parallel Hayward conditions, perhaps, something helpful may be gleaned from reading about our program.

Our chapter consists of about one hundred members. There are some one hundred and twenty-five students of vocational agriculture and one hundred and fifty non-vocational students in the department. The high school enrollment is about twenty-five hundred. There is considerable student turn-over in the school. This, of course, carries over into agriculture.

The chapter is organized on the functional basis. The usual officers are included and eight standing or permanent committees. There is little occasion for special committees. The entire program of work is made, progress noted and accomplished through these eight committees. When unexpected problems, activities or occasion arise, the president assigns these to the committees, where they logically should go. If these prove to be of a continuing nature, this fact is recorded under recommendations in the accomplishment report and therefore appear in the next semesters program of work of the chairmen concerned.

Our roll of officers and chairmen

appears as follows: president, first vice-president, second vice-president, secretary, treasurer, reporter, sentinel and photographer. The committees are program, finance, education, community service, relations, shows and fairs, recreation, examination and initiation.

Officers are elected each semester, excepting the treasurer whose term is for one year. Committee chairmen are appointed for one semester, excepting chairman of shows and fairs. All appointments are made by the president with the approval of the executive committee. The executive committee consists of all officers and chairmen. It meets upon a stated day for one hour per week. The first vice-president is chairman of the executive committee. Second vice-president is chairman of examination and initiation.

Except where the nature of the work demands otherwise, we have, in general, adopted the policy of electing officers and appointing chairmen each semester, not because it gets the most done, but rather because it tends to bring out the leadership. Furthermore it often brings it out where least expected. It gives more members some basic training in group leadership. It has been said, "Without vision, the people perish." It can also be said that without leadership the chapter will perish or at best be left to wither on the vine.

All committees meet on the same day. Most of them at the same time, at noon, on the student's own time and for one-half hour. Committee meetings precede the stated meeting of the executive committee.

The very center and core of chapter work is the committees. A chapter is no stronger than its committees make it. This is functional education at its best. Here is democracy at work. Every chapter member is assigned a committee, if possible of his own choice.

At the first meeting the committee is organized, secretary appointed and members recorded. The chairman explains

the nature of the committee, its scope and policies. He then starts to develop the program of work through the committee members. As the program develops the secretary lists the activities, goals and other pertinent data. When these are fully listed and discussed, each member is assigned an activity or activities as his responsibility. This, then, should add up to a complete program of work for that committee. It usually takes three or four meetings to develop the program of work and assign its parts understandingly.

All committees are called to order promptly on the minute, secretary calls roll, reads the minutes of the last meeting and the chairman calls for an oral progress report from each member. It is the summary of these reports that the chairman takes to the next executive committee meeting. The chairman should always appear before his committee with a written agenda or program, which the adviser checks before the committee is called to order. Simple parliamentary practice is followed closely.

Our chapter is making an honest and determined effort to have the thoughts and ideas well from the bottom up rather than to be sprinkled or deluged from the top down. It is proving to be a slow and even at times a discouraging business. However, we do know that the idea is basically sound, that it is developing leadership and that it develops it in places least expected. Furthermore, it is proving to be a morale builder. It certainly adds to a members self confidence when he successfully leads a group, but it does far more than that for it really makes him a respected member of society, a society of his fellows. Thus, it teaches co-operation and management objectively. It is real. It is proving effective, and better yet, it is attractive and furnishing its share of fun and good sportsmanship.

### Committee Reports

Every month each chairman makes a written report, neat and to the point. However, this report is given to the entire chapter orally and wherever possible through members of his committee, using visual aids where fitting. These written reports when summarized constitute the accomplishment report at the close of the semester. In addition, each officer and committee chairman makes a pictorial report, showing the most important activities and the corresponding accomplishments of this committee.

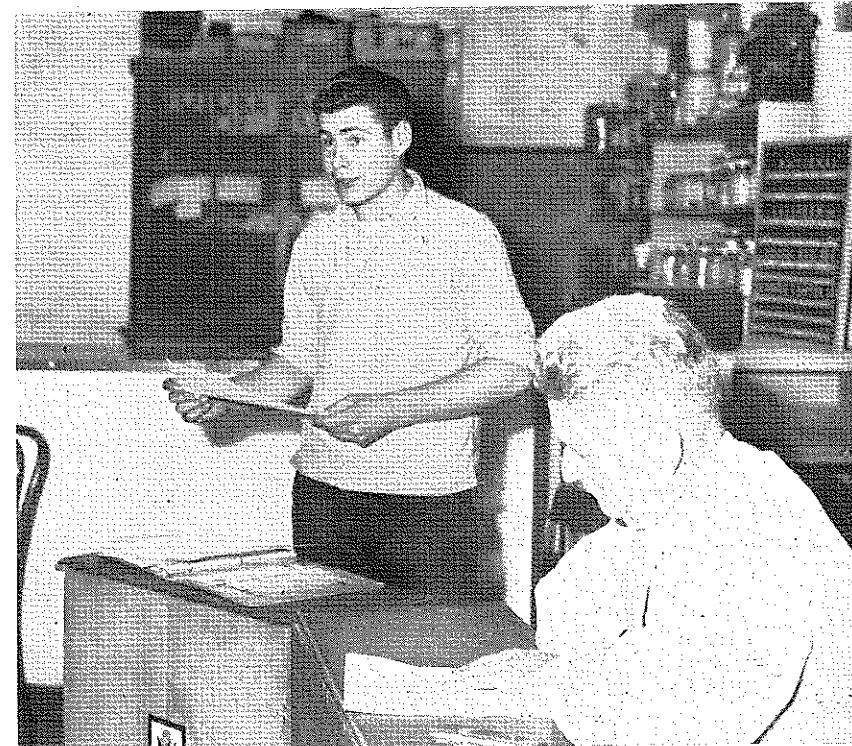
It is our firm belief that there should be no window dressing in these reports. One often finds them inaccurate, incomplete and quite a mess. And yet it is the student's very own work. By looking the situation fairly and squarely in the face, he knows where he stands and how far and in what direction he must go. Furthermore, one finds that the boys really respect one more for calling a spade a spade. When the student learns that he won't be hurt in any way because he makes mistakes or doesn't know, when he knows that the speaking and writing is really necessary, he may open up in written and oral speech so that something can be accomplished. We

feel that it is the adviser's job to counsel, guide, encourage, and check the work at critical times and places, especially the work of the chairman with whom he works. "Hands off" is our watch word. It isn't always easy to do. We feel that we are teachers, not inspectors or bosses. A firm and understanding stand for democratic processes pays dividends in chapter work.

Our chapter meets twice each month at night during the school year—September through June. One night is for recreation and one for regular business, strictly business. At the business meeting reports are given and an attempt is made to inform the members of the total or overall program of the chapter. Emphasis is given to finances. All business meetings are limited to two hours. One day meeting lasting one hour is held monthly.

A five hour leadership training class is held in September before school opens. In the morning of this day instruction is given in office organization and management, desk and locker organization and something of general chapter business related to the individual. In the afternoon committee work is stressed. Each adviser goes through the work, starting with the individual's responsibility in the program of work and continuing through the preparation of the chairman's agenda, organization of the committee, recording of the work and other related matter.

Some years ago it was realized that in order to get down to business our chapter should have and maintain an office. While it cannot be said that our present office is an object of beauty or for that matter fully adequate, still it suffices. Here each officer and committee chairman has a desk or locker. Here is found such equipment as typewriter, adding machine, files and general office equipment and supplies. We have found the F.F.A. office most helpful.



An individual gives his report.

## In-service up-grading of teachers of vocational agriculture

(Continued from Page 134)

to the current literature and opinions about effectiveness, it seems reasonable to suggest that certain procedures should be used more generally.

1. More consideration should be given by supervisors, both teacher trainers and members of the state supervisory staff, to finding the strong points of the teacher and assisting the teacher to build upon them rather than stressing the correction of weaknesses.

2. Short-unit courses on and off campus in summer and winter should be used more extensively as a means of improving teachers both technically and professionally.

3. A subject-matter specialist should be provided in each state. Subject-matter problems might be cared for by a staff member who devotes part time to the subject-matter area. These problems can be handled more effectively, however, by one or more staff members who devote full time to the area of subject matter.

4. Teachers should be encouraged to use advisory councils to assist in the formulation of policies relative to their programs and in the evaluation of their programs.

5. Representative teachers should be made a part of the policy-forming group or should serve as an advisory committee to the policy-forming group in each state so that the needs of teachers and their students may receive more intimate consideration, and so that democratic living may be exemplified.

The amount spent by local governments for recreation facilities is much less per capita in rural areas than in urban.

## A Leader Lost — Roy Olney —



Roy Olney

DR. ROY A. Olney died very suddenly while at work in Alfred, New York, on October 7, 1949. At the time of his death, he was Professor of Rural Education in Cornell University.

Professor Olney began his professional career as a

teacher in vocational agriculture in New York in 1915. From 1920 to 1923 he was Assistant State Supervisor in North Carolina. He became a member of the teacher training staff in West Virginia in 1923 where he remained until 1938 when he returned to New York as a member of the teacher training staff in Cornell University.

Professor Olney was Editor of *Agricultural Education Magazine* from 1935-39. He always maintained a vital interest in vocational agriculture and devoted his attention wholeheartedly to the development and improvement of the program. His friendly and helpful spirit will be sorely missed by the many persons in the field who knew him.

## Satisfactions of a teacher

IN the last three years we have had ninety-six different members in our chapter. Fourteen of these boys are state farmers; one state president, one state treasurer, and one district vice-president. In our senior high school (three years) of over five hundred students at least one F.F.A. member has been elected to the student council each year. Last year our chapter president and vice-president were vice-president and president respectively in the student council.

E. H. Foreman, Teacher  
Albany, Oregon

## Interpreting the vocational program

(Continued from Page 124)

5. Other chapters elected the local legislator as an honorary chapter farmer member in recognition of his interest and support of their program.

6. Local Future Farmer chapters present parliamentary procedure demonstrations or other programs before local civic groups where members of the legislature are present.

These are only a few of the activities pursued by local chapters and the State Association in attempting to inform legislators of the nature and scope of the vocational program and the need for their interest and support, if the program is to succeed.



Earl J. McGrath, U. S. Commissioner of Education  
R. W. Gregory—Asst't Commissioner for Vocational Education  
W. T. Spanton—Chief, Agricultural Education  
D. M. Clements—Asst't Chief, Agricultural Education

- Specialists:  
H. B. Swanson—Teacher Training R. E. Naugher—Part-Time and Evening  
A. H. Hollenberg—Farm Mechanics A. W. Tenney—Subject Matter  
E. J. Johnson—Program Planning W. N. Elam—Program Planning
- d—directors s—supervisors as—assistant supervisors  
rs—regional supervisors ds—district supervisors FFA—specialist FFA  
t—teacher trainers it—itinerant teacher trainers  
rt—research workers Nt—Negro teacher trainers  
sms—subject matter specialists fms—farm mechanics specialists

Note—Please report changes in personnel for this directory to Dr. W. T. Spanton, Chief, Agricultural Education, U. S. Office of Education.

- ALABAMA**  
d—R. E. Cammack, Montgomery  
s—J. C. Cannon, Montgomery  
as—L. L. Daley, Montgomery  
as—L. L. Sellers, Auburn  
as—H. F. Gibson, Auburn  
as—T. L. Faulkner, Auburn  
as—H. R. Calver, Auburn  
as—B. P. Dilworth, Auburn  
as—H. W. Green, Auburn  
t—B. E. Chesnut, Auburn  
t—R. W. Montgomery, Auburn  
t—D. N. Bottoms, Auburn  
t—W. A. Broyles, Auburn  
ms—E. L. McGraw, Auburn  
Nt—Arthur Floyd, Tuskegee  
Nt—F. T. McQueen, Tuskegee  
Nt—E. L. Donald, Tuskegee
- ARIZONA**  
d—s—J. R. Cullison, Phoenix  
t—R. W. Cline, Tucson  
t—W. A. Schafer, Tucson
- ARKANSAS**  
d—J. M. Adams, Little Rock  
s—C. R. Wilkey, Little Rock  
as—S. D. Mitchell, Little Rock  
ds—T. A. White, Monticello  
ds—O. J. Seymour, Arkadelphia  
ds—J. A. Niven, Russellville  
ds—George Sullards, Jonesboro  
t—Roy W. Roberts, Fayetteville  
t—Lavan Shoptaw, Fayetteville  
Nt—L. R. Gaines, Pine Bluff  
Nt—A. G. Kirby, Pine Bluff
- CALIFORNIA**  
d—Wesley P. Smith, Sacramento  
s—B. J. McMahon, San Luis Obispo  
rs—B. R. Denbigh, Los Angeles  
rs—Howard F. Chappell, Sacramento  
rs—A. G. Rinn, Fresno  
rs—J. C. Gibson, Los Angeles  
rs—G. A. Hutchings, San Luis Obispo  
rs—M. K. Luther, San Jose  
rs—R. H. Pedersen, Fresno  
rs—J. Everett Walker, Chico  
t—S. S. Sutherland, Davis  
t—E. M. Juergenson, Davis  
t—H. H. Burlingham, San Luis Obispo  
sms—Geo. P. Couper, San Luis Obispo  
sms—J. I. Thompson, San Luis Obispo  
sms—John D. Lawson, San Luis Obispo
- COLORADO**  
d—E. C. Comstock, Denver  
as—A. R. Bonger, Denver  
as—Irwin C. Elliott, Denver  
t—R. W. Canada, Ft. Collins  
t—E. J. F. Early, Ft. Collins
- CONNECTICUT**  
d—Emmett O'Brien, Hartford  
s—R. L. Hahn, Hartford  
t—W. Howard Martin, Storrs
- DELAWARE**  
d—R. W. Hein, Newark  
s—W. L. Mowlds, Dover  
t—Paul M. Hodgson, Newark  
Nt—Wm. R. Wynder, Dover
- FLORIDA**  
d—T. D. Bailey, Tallahassee  
s—Harry Wood, Tallahassee  
t—E. W. Garris, Gainesville  
t—W. T. Loftin, Gainesville  
ds—J. G. Smith, Gainesville  
ds—F. L. Northrop, Gainesville  
ds—T. L. Barrineau, Jr., Tallahassee  
Nt—L. A. Marshall, Tallahassee  
Nt—G. W. Conoly, Tallahassee
- GEORGIA**  
d—M. D. Mobley, Atlanta  
s—T. G. Walters, Atlanta  
ds—George I. Martin, Tifton  
ds—C. M. Reed, Carrollton  
ds—J. N. Baker, Swainsboro  
ds—J. H. Mitchell, Athens  
t—John T. Wheeler, Athens  
t—R. H. Tolbert, Athens  
t—G. L. O'Kelley, Athens  
t—W. R. Brown, Athens  
sms—Ray V. Neal, Athens  
sms—A. O. Dunnean, Athens  
FFA—T. D. Brown, Atlanta  
FFA—A. L. Morris, Atlanta  
Nt—Alva Tabor, Fort Valley  
Nt—S. P. Fugate, Swainsboro  
Nt—B. Anderson, Fort Valley  
Nt—McKinley Wilson, Fort Valley
- HAWAII**  
s—W. H. Coulter, Honolulu, T. H.  
as—Riley Ewing, Honolulu, T. H.  
t—F. E. Armstrong, Honolulu, T. H.
- IDAHO**  
d—William Kerr, Boise  
t—Stanley S. Richardson, Boise  
as—E. L. Lovell, Pocatello  
t—H. A. Winner, Moscow  
t—Dwight L. Kindsoy, Moscow
- ILLINOIS**  
d—Ernest J. Simon, Springfield  
s—J. E. Hill, Springfield  
as—J. B. Adams, Springfield

- as—A. J. Andrews, Springfield  
as—H. M. Strubinger, Springfield  
as—P. W. Proctor, Springfield  
as—H. R. Damisch, Springfield  
t—H. M. Hamlin, Urbana  
t—G. P. Deyoe, Urbana  
t—J. N. Weiss, Urbana  
t—L. J. Phipps, Urbana  
t—Leo L. Knutti, Urbana  
sms—Melvin Henderson, Urbana  
sms—H. J. Rucker, Urbana  
sms—W. H. Witt, Urbana
- INDIANA**  
d—Deane E. Walker, Indianapolis  
s—H. B. Taylor, Indianapolis  
t—B. C. Lawson, Lafayette  
t—Ralph Bentley, Lafayette  
it—K. W. Kiltz, Lafayette  
it—H. W. Leonard, Lafayette  
it—E. E. Chapin, Lafayette
- IOWA**  
s—H. T. Hall, Des Moines  
as—M. Z. Hendren, Des Moines  
as—G. F. Barton, Des Moines  
t—Barton Morgan, Ames  
t—John B. McClelland, Ames  
t—J. A. Starrak, Ames  
t—T. E. Sexauer, Ames  
t—C. E. Bundy, Ames
- KANSAS**  
d—C. M. Miller, Topeka  
s—L. B. Pollow, Topeka  
t—A. P. Davidson, Manhattan  
t—H. E. Kuyler  
it—L. F. Hall, Manhattan  
it—Loren Whippa, Manhattan
- KENTUCKY**  
d—Watson Armstrong, Frankfort  
s—E. F. Hilton, Frankfort  
as—B. G. Moore, Frankfort  
as—B. S. Wilson, Frankfort  
as—Floyd Cox, Lexington  
as—W. C. Montgomery, Frankfort  
as—Carrie Hammonds, Lexington  
t—W. R. Tabb, Lexington  
t—Stanley Wall, Lexington  
Nt—P. J. Manly, Frankfort
- LOUISIANA**  
d—J. R. Gamble, Baton Rouge  
s—W. J. Parent, Baton Rouge  
ds—J. N. Carpenter, Baton Rouge  
ds—C. P. McVea, Baton Rouge  
ds—Gordon Canterbury, Baton Rouge  
FFA—Delmar Walker, Baton Rouge  
fms—Curtis Jacobs, Baton Rouge  
Nt—M. J. Clark, Baton Rouge  
Nt—C. H. Chapman, Baton Rouge  
Nt—E. C. Wright, Baton Rouge  
t—A. Larrivee, Lafayette  
t—A. A. LeBlanc, Lafayette  
t—Roy L. Davenport, University  
t—Malcolm C. Gaar, University  
t—J. C. Floyd, University  
t—Harry J. Braud, University
- MAINE**  
d—Morris P. Cates, Augusta  
s—John A. Snell, Augusta  
as—Wallace H. Elliott, Orono
- MARYLAND**  
d—John J. Seidel, Baltimore  
s—Harry M. MacDonald, Baltimore  
t—Arthur M. Abalt, College Park  
Nt—Claud C. Marion, Princess Anne
- MASSACHUSETTS**  
d—M. Norcross Stratton, Boston  
s—John G. Glavin, Boston  
t—Jesse A. Taft, Amherst  
t—Charles F. Oliver, Amherst
- MICHIGAN**  
d—Ralph C. Wenrich, Lansing  
s—Harry E. Neman, Lansing  
as—Luka H. Kelley, Lansing  
as—E. A. Lightfoot, Lansing  
t—H. M. Byram, East Lansing  
t—H. Paul Sweany, East Lansing  
t—Raymond M. Clark, East Lansing  
t—Guy Timmons, East Lansing  
t—Raymond Garner, East Lansing
- MINNESOTA**  
d—Harry C. Schmidt, St. Paul  
s—G. R. Cochran, St. Paul  
as—W. J. Korteznaki, St. Paul  
t—M. J. Peterson, St. Paul  
t—H. W. Kitts, St. Paul  
t—W. T. Bjoraker, St. Paul
- MISSOURI**  
d—Tracy Dale, Jefferson City  
s—C. M. Humphrey, Jefferson City  
t—J. A. Bailey, Jefferson City  
Nt—J. N. Freeman, Jefferson City  
ds—Joe Moore, Mt. Vernon  
t—C. F. Estrom, Columbia  
t—C. V. Roderick, Columbia  
sms—Joe Duck, Columbia

- as—B. P. Patterson, Columbia  
as—W. E. Gore, Columbia  
ds—W. M. Mahony, Honea Pt.  
ds—W. R. Carter, Walterboro  
ds—F. L. Barton, Chester  
ds—C. G. Zimmerman, Florence  
t—J. B. Monroe, Clemson  
t—B. H. Stribling, Clemson  
t—F. E. Kirkley, Clemson  
t—D. L. Williams, State College  
t—T. A. White, Clemson  
Nt—Gabe Buckman, Orangeburg  
Nt—K. M. Keyes, Orangeburg
- SOUTH DAKOTA**  
d—H. S. Freeman, Pierre  
s—H. E. Urton, Pierre  
t—Stanley Sundet, Brookings
- TENNESSEE**  
ds—G. E. Freeman, Nashville  
as—J. W. Brimm, Nashville  
as—W. L. Sparks, Nashville  
ds—H. N. Parks, Gallatin  
ds—L. A. Carpenter, Knoxville  
ds—H. C. Colvett, Jackson  
t—N. E. Fitzgerald, Knoxville  
t—B. S. Wilson, Knoxville  
t—R. W. Beamer, Knoxville  
t—M. M. Clendenon, Knoxville  
sms—A. J. Paulus, Knoxville  
t—E. B. Knight, Cookeville  
Nt—W. A. Flowers, Nashville  
Nt—H. L. Taylor, Nashville
- TEXAS**  
d—W. E. Lowry, Austin  
s—Robert A. Manire, Austin  
as—R. Lano Barron, Austin  
as—George H. Hurt, Austin  
rs—O. T. Ryan, Lubbock  
rs—Vannoy Stewart, Commerce  
rs—C. D. Parker, Kingsville  
ds—A. B. Childers, Mart  
ds—O. M. Holt, College Station  
ds—W. E. Williams, Alpine  
ds—J. B. Payne, Stephenville  
ds—L. I. Samuel, Arlington  
ds—J. A. Marshall, Nacogdoches  
ds—T. R. Rhodes, Huntsville  
t—E. R. Alexander, College Station  
t—Henry Ross, College Station  
t—W. W. Mollroy, College Station  
sms—W. A. Shorrill, College Station  
t—J. L. Moses, Huntsville  
t—Ray L. Chappelle, Lubbock  
t—T. L. Leach, Lubbock  
t—S. V. Burks, Kingsville  
it—E. V. Walton, College Station  
it—G. H. Morrison, Huntsville  
it—F. B. Wines, Kingsville  
it—L. M. Hargrave, Lubbock  
it—Feral M. Robinson, Huntsville  
it—Ray Epps, Huntsville  
sms—Kylie Lettwich, Huntsville  
Nt—E. M. Norris, Prairie View  
Nt—O. J. Thomas, Prairie View  
Nt—E. E. Collins, Texarkana  
Nt—S. E. Palmer, Tyler  
Nt—Gus Jones, Caldwell  
Nt—Wardell Thompson, Prairie View  
Nt—Paul Rutledge, Palestine
- UTAH**  
d—s—Mark Nichols, Salt Lake City  
as—Elvin Downs, Salt Lake City  
t—L. R. Humpherys, Logan
- VERMONT**  
d—John E. Nelson, Montpelier  
s—C. W. Watson, Montpelier  
t—James E. Woodhull, Burlington
- VIRGINIA**  
d—Richard N. Anderson, Richmond  
s—F. B. Cale, Richmond  
as—R. E. Bass, Richmond  
as—T. B. Downing, Ivor  
ds—W. R. Dammons, Roynkins  
ds—Cabel Love, Blacksburg  
ds—W. R. Logge, Winchester  
ds—J. C. Green, Powhatan  
ds—W. C. Dudley, Appomattox  
ds—J. A. Hardy, Pulaski  
Nds—C. B. Jetter, Martinsville  
t—H. W. Sanders, Blacksburg  
t—T. J. Horne, Blacksburg  
t—C. E. Richard, Blacksburg  
t—C. S. McLearn, Blacksburg  
t—B. C. Bass, Blacksburg  
fms—T. J. Wakeman, Blacksburg  
fms—E. G. Thompson, Blacksburg  
Nt—J. R. Thomas, Petersburg  
Nt—A. J. Miller, Petersburg  
Nt—R. W. Watson, Petersburg
- WASHINGTON**  
d—H. G. Halstead, Olympia  
s—Bert L. Brown, Olympia  
as—M. C. Knox, Olympia  
as—H. M. Olson, Olympia  
as—J. W. Evans, Olympia  
as—E. M. Webb, Pullman  
as—Oscar Loreen, Pullman  
fms—Dave Hartzog, Pullman
- WEST VIRGINIA**  
d—John M. Lowe, Charleston  
s—H. N. Hansucker, Charleston  
as—S. D. McMillen, Charleston  
t—D. W. Parsons, Morgantown  
t—C. W. Hill, Morgantown  
Nt—W. T. Johnson, Institute
- WISCONSIN**  
d—C. L. Greiber, Madison  
s—Louis M. Sasman, Madison  
t—J. A. James, Madison  
it—D. C. Aebischer, Madison  
it—Clarence Bousack, Madison  
t—V. E. Nylin, Platteville  
t—J. M. May, River Falls
- WYOMING**  
d—Sam Hitchcock, Cheyenne  
s—Percy Kirk, Cheyenne  
t—Jack Ruch, Laramie

- MONTANA**  
d—Ralph Kouck, Bozeman  
s—A. W. Johnson, Bozeman  
as—Arthur B. Ward, Bozeman  
t—R. H. Palmer, Bozeman  
t—H. E. Rodeberg, Bozeman
- NEBRASKA**  
d—G. F. Liebendorfer, Lincoln  
s—L. D. Clements, Lincoln  
as—H. W. Deems, Lincoln  
t—C. E. Rhoad, Lincoln  
t—C. C. Minter, Lincoln  
fms—M. G. McCreight, Lincoln
- NEVADA**  
d—Donald C. Cameron, Carson City  
s—John W. Bunton, Carson City
- NEW HAMPSHIRE**  
d—Walter M. May, Concord  
s—Earl H. Little, Concord  
t—Philip S. Barton, Durham
- NEW JERSEY**  
d—John A. McCarthy, Trenton  
s—H. O. Sampson, New Brunswick  
as—T. O. E. Kisor, New Brunswick  
as—t—W. H. Evans, New Brunswick
- NEW MEXICO**  
s—L. C. Dalton, State College  
t—Carl G. Howard, State College  
as—J. L. Perrin, State College
- NEW YORK**  
d—A. K. Getman, Albany  
s—R. C. S. Sutliff, Albany  
as—W. J. Weaver, Albany  
as—J. W. Hatch, Albany  
as—A. E. Champlin, Alfred  
t—R. E. Hoskins, Ithaca  
t—W. A. Smith, Ithaca  
t—W. R. Kunsela, Ithaca
- NORTH CAROLINA**  
d—J. W. Smith, Raleigh  
s—Roy H. Thomas, Raleigh  
ds—R. J. Peeler, Raleigh  
ds—E. N. Meekins, Raleigh  
ds—J. M. Osteen, Rockingham  
ds—T. H. Stafford, Asheville  
ds—T. B. Elliott, Woodland  
ds—N. B. Chesnut, Whiteville  
t—Leon E. Cook, Raleigh  
t—L. O. Armstrong, Raleigh  
t—J. K. Coggin, Raleigh  
t—F. A. Nylund, Raleigh  
Nt—B. B. Simmons, Greensboro  
Nt—C. E. Dean, Greensboro
- NORTH DAKOTA**  
d—E. F. Riley, Wahpeton  
s—Ernest L. DeAlton, Fargo  
as—t—Shubel D. Owen, Fargo  
as—t—Winston H. Dolve, Fargo
- OHIO**  
d—J. R. Strobel, Columbus  
s—Ralph A. Howard, Columbus  
as—W. G. Weiler, Columbus  
ds—E. O. Bolender, Columbus  
ds—F. J. Ruble, Columbus  
ds—D. R. Purkey, Columbus  
t—Ralph E. Bender, Columbus  
t—W. F. Stewart, Columbus  
t—Harold G. Keeneatrick, Columbus  
t—R. J. Woodin, Columbus  
fms—A. C. Kennedy, Columbus  
rt—Ray Fife, Columbus
- OKLAHOMA**  
d—s—J. B. Perky, Stillwater  
as—W. R. Felton, Stillwater  
ds—Byrle Killian, Stillwater  
ds—Hugh D. Jones, Stillwater  
ds—Cleo A. Collins, Stillwater  
ds—Benton F. Thomason, Stillwater  
FFA—Tom Daniel, Stillwater  
t—C. L. Angerer, Stillwater  
t—Don M. Orr, Stillwater  
t—Chris White, Stillwater  
Nt—D. C. Jones, Langston
- OREGON**  
d—O. I. Paulson, Salem  
s—Ralph L. Morgan, Salem  
t—H. H. Gibson, Corvallis  
t—Henry Ten Pas, Corvallis
- PENNSYLVANIA**  
d—Paul L. Cressman, Harrisburg  
s—H. C. Fetterolf, Harrisburg  
as—V. A. Martin, Harrisburg  
t—Henry S. Brunner, State College  
t—William F. Hall, State College  
t—C. S. Anderson, State College  
t—David R. McClay, State College  
t—Glenn Z. Stevens, State College
- PUERTO RICO**  
d—L. Garcia Hernandez, San Juan  
s—Nicholas Mendez, San Juan (on leave)  
s—Samuel Mollary, San Juan (acting)  
as—Rafael Muller, San Juan  
as—Juan Acosta Henriquez, San Juan  
ds—Frederico Carbonell, San Juan  
ds—Juan Melendez, Cayey  
ds—Gregorio Mendez, Arecibo  
ds—Nicolas Hernandez, Aguadilla  
t—Juan Robles, Mayaguez
- RHODE ISLAND**  
s—Everett L. Austin, Providence

- as—B. E. Gross, Hattiesburg  
as—E. W. Holmes, Oxford  
as—T. F. Winstead, Morton  
as—T. V. Majors, Ulen  
as—A. E. Strain, Long Beach  
t—V. G. Martin, State College  
t—J. F. Snoggin, State College  
t—O. L. Snowden, State College  
t—D. L. Williams, State College  
as—A. E. Strain, State College  
Nt—A. D. Fobbs, Alcorn  
Nt—A. G. Gordon, Alcorn  
Nt—R. H. Derden, Alcorn
- MONTANA**  
d—Ralph Kouck, Bozeman  
s—A. W. Johnson, Bozeman  
as—Arthur B. Ward, Bozeman  
t—R. H. Palmer, Bozeman  
t—H. E. Rodeberg, Bozeman
- NEBRASKA**  
d—G. F. Liebendorfer, Lincoln  
s—L. D. Clements, Lincoln  
as—H. W. Deems, Lincoln  
t—C. E. Rhoad, Lincoln  
t—C. C. Minter, Lincoln  
fms—M. G. McCreight, Lincoln
- NEVADA**  
d—Donald C. Cameron, Carson City  
s—John W. Bunton, Carson City
- NEW HAMPSHIRE**  
d—Walter M. May, Concord  
s—Earl H. Little, Concord  
t—Philip S. Barton, Durham
- NEW JERSEY**  
d—John A. McCarthy, Trenton  
s—H. O. Sampson, New Brunswick  
as—T. O. E. Kisor, New Brunswick  
as—t—W. H. Evans, New Brunswick
- NEW MEXICO**  
s—L. C. Dalton, State College  
t—Carl G. Howard, State College  
as—J. L. Perrin, State College
- NEW YORK**  
d—A. K. Getman, Albany  
s—R. C. S. Sutliff, Albany  
as—W. J. Weaver, Albany  
as—J. W. Hatch, Albany  
as—A. E. Champlin, Alfred  
t—R. E. Hoskins, Ithaca  
t—W. A. Smith, Ithaca  
t—W. R. Kunsela, Ithaca
- NORTH CAROLINA**  
d—J. W. Smith, Raleigh  
s—Roy H. Thomas, Raleigh  
ds—R. J. Peeler, Raleigh  
ds—E. N. Meekins, Raleigh  
ds—J. M. Osteen, Rockingham  
ds—T. H. Stafford, Asheville  
ds—T. B. Elliott, Woodland  
ds—N. B. Chesnut, Whiteville  
t—Leon E. Cook, Raleigh  
t—L. O. Armstrong, Raleigh  
t—J. K. Coggin, Raleigh  
t—F. A. Nylund, Raleigh  
Nt—B. B. Simmons, Greensboro  
Nt—C. E. Dean, Greensboro
- NORTH DAKOTA**  
d—E. F. Riley, Wahpeton  
s—Ernest L. DeAlton, Fargo  
as—t—Shubel D. Owen, Fargo  
as—t—Winston H. Dolve, Fargo
- OHIO**  
d—J. R. Strobel, Columbus  
s—Ralph A. Howard, Columbus  
as—W. G. Weiler, Columbus  
ds—E. O. Bolender, Columbus  
ds—F. J. Ruble, Columbus  
ds—D. R. Purkey, Columbus  
t—Ralph E. Bender, Columbus  
t—W. F. Stewart, Columbus  
t—Harold G. Keeneatrick, Columbus  
t—R. J. Woodin, Columbus  
fms—A. C. Kennedy, Columbus  
rt—Ray Fife, Columbus
- OKLAHOMA**  
d—s—J. B. Perky, Stillwater  
as—W. R. Felton, Stillwater  
ds—Byrle Killian, Stillwater  
ds—Hugh D. Jones, Stillwater  
ds—Cleo A. Collins, Stillwater  
ds—Benton F. Thomason, Stillwater  
FFA—Tom Daniel, Stillwater  
t—C. L. Angerer, Stillwater  
t—Don M. Orr, Stillwater  
t—Chris White, Stillwater  
Nt—D. C. Jones, Langston
- OREGON**  
d—O. I. Paulson, Salem  
s—Ralph L. Morgan, Salem  
t—H. H. Gibson, Corvallis  
t—Henry Ten Pas, Corvallis
- PENNSYLVANIA**  
d—Paul L. Cressman, Harrisburg  
s—H. C. Fetterolf, Harrisburg  
as—V. A. Martin, Harrisburg  
t—Henry S. Brunner, State College  
t—William F. Hall, State College  
t—C. S. Anderson, State College  
t—David R. McClay, State College  
t—Glenn Z. Stevens, State College
- PUERTO RICO**  
d—L. Garcia Hernandez, San Juan  
s—Nicholas Mendez, San Juan (on leave)  
s—Samuel Mollary, San Juan (acting)  
as—Rafael Muller, San Juan  
as—Juan Acosta Henriquez, San Juan  
ds—Frederico Carbonell, San Juan  
ds—Juan Melendez, Cayey  
ds—Gregorio Mendez, Arecibo  
ds—Nicolas Hernandez, Aguadilla  
t—Juan Robles, Mayaguez
- RHODE ISLAND**  
s—Everett L. Austin, Providence