

THE development of leadership plays an important part in the educative process; to be effective such leadership must be recognized and accepted by the group, and must avoid domination on the one hand and subordination on the other.—Selected



The Agricultural Education Magazine

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Editorial Comment

Agricultural Education Loses a Leader

AGRICULTURAL education in Georgia and in the nation has lost one of its most vigorous and effective leaders thru the death of L. M. Sheffer. He was taken ill during a staff conference in Macon, Georgia, June 8, and the following day underwent a major operation. Death came June 20, with his wife and associates at his bedside.

Mr. Sheffer came to Georgia from Kentucky. He was a graduate of Kentucky State Teachers College and the University of Wisconsin. He entered teacher-training in agriculture at the Georgia State College of Agriculture in 1917 immediately after the passage of the



L. M. Sheffer

1917 immediately after the passage of the Smith-Hughes Act. He became Assistant Supervisor of Agriculture in 1919 and was made State Supervisor in 1926.

Wise Administrator

Mr. Sheffer possessed the capacity to pioneer for agricultural education, to convince school administrators, board members, and the public of the needs for a practical and functional program of education for the farmer and farm boy in Georgia. He also had the ability to give guidance and direction to an expanding and growing program of agricultural education. He saw the program grow from about a dozen departments in 1917 to 388 white and 114 colored departments in 1942.

The farm people of Georgia need facilities to solve many of their farm and home problems. The school, Mr. Sheffer believed, should provide such facilities and the necessary leadership to enable the farm families to deal successfully with these problems. He often said that no woman should be required to labor over a hot stove all day in order to conserve a few cans of fruit or vegetables when the family could take the products to a community canning plant and preserve several hundred quarts of products in one day and in addition have a good time with several other families that were doing the same thing. He provided the leadership in making every agricultural department in Georgia a center of community activity. He worked to see every department with a modern community canning plant and community farm shop. In many departments he helped to provide facilities for treating fence posts, incubators for custom hatching, feed mills, saw mills, potato curing houses, and the

Mr Sheffer will be missed in all the councils where vocational education in agriculture is discussed. He worked hard and contributed much to the passage of the George-Dean Bill. In the last few years he spent much time in Washington working to promote farm legislation and legislation especially designed to promote rural education.

Loved Farm Life

He loved farm life. Soon after coming to Georgia, he bought a large farm and developed one of the most successful programs of dairy farming to be found in the state. His large number of acres of fertile soil, excellent herd of dairy cattle, brood mares, and fine walking horses gave him much pleasure and relaxation.

He directed the activities of a large and loyal staff and directed the supervision of 500 teachers of vocational agriculture. His ability to drive to the heart of a problem, his keen sense of humor, and his wealth of stories to illustrate the point made of him an ideal leader. When the going got tough and others were ready to quit or fight he would chuckle, tell a story that would oil the troubled waters and proceed to solve the problem. Quibbling over small points always brought the remark, "Boys, stop trying to split a hair with a broad ax."

His associates in Georgia and the nation will remember him for his considerateness, his loyalty, his sense of humor, and his genuine concern for the welfare of the farm people of

Learning to Live in the World

LONG ago it was said that people are "born into the world." Today we take this expression literally. For better or for worse, the farm boy in the most remote part of the United States is from the start a member of the world society.

A major part of the contribution of agricultural education to the development of the next generation will be in helping farm people of all ages to adjust to their larger environment. There will be continuous adjustments to be made. Those who make them will be happy and useful citizens of the world; those who do not make them will be unhappy obstructionists of world progress.

Much depends on the experiences farm children have. Teachers of agriculture can help to direct these experiences. They can influence adults to start their children with the assumption that they are living in the world, so that no more time will be wasted in vain attempts at isolation. They can utilize the interest in world geography which children bring with them into the high school by showing them that the decisions made on every quarter-section hinge on apparently remote events. They must try to teach everything in relation to the total situation which surrounds it; they must not distort their teaching by presenting partial and incomplete pictures.

Our children will not get a chance to adjust to the world environment if our adults do not adjust. Adult prejudices may ruin the children's chances for adjustment. Adults may ruin the world, and children and adults alike may perish before the children have time to grow up. H. G. Wells must have been talking about adult education when he said that there is a race on between education and catastrophe. It is too late for any but adults to avert catastrophe.

Agricultural Adjustments

Some of the major adjustments that we face are in agriculture and country life. Already we have reduced or eliminated many tariffs on agricultural products among the United Nations; the Atlantic Charter calls for further tariff adjustments among all the nations. These tariff changes seem to be necessary, but they will disrupt the life of many farming areas. If we take an active part in world affairs, American farm machinery and American agricultural science will be used to develop the backward nations of the earth, first into self-sufficiency and then into active competition for the food markets of the world. New industries are being born during the war. Industry is being carried farther and farther into the rural regions as war industries expand. The disparity between farm and city earning is disappearing. The gap between city and country is narrowing. Farmers are becoming a smaller and smaller minority. The wide world of occupations beckons farm youth. Easy travel by airplane and constant and rapid communication with all parts of the world will in a future orderly world make it possible for farm people to migrate where they will, so that a boy now in high school may expect to be as much at home in Asia or Africa as our fathers were in the next county.

Because farm people seem now to be more isolated than others from world affairs, it will be easier for them than for others to retreat into a new "normalcy" after the war. If they do, they will, of course, be only hiding their heads in the sand. Teachers of agriculture can do much to keep them realistic and to hold their gaze on the whole picture rather than upon some small detail. They can help farm people to see the attractive features of the new world we are entering, the new blessings we are to gain, and the old tragedies we are to avoid.

It is a great privilege to live in a time when the world is being shaped to a new and grander pattern. It is fortunate that teachers of agriculture are, for the most part, young, so that they view the changes we face hopefully and so that they may live to see the promised land toward which we are undoubtedly journeying by many rocky detours.

Future Farmers of the World, we salute you and your world-minded teachers who will help you to fulfill the new role which destiny has awarded you!

A. K. GETMAN

R. W. GREGORY

Agricultural Education at the Crossroads*

R. W. GREGORY, U. S. Office of Education Washington, D. C.

IN CASTING about for a place to begin this discussion I have come to the conclusion that I should start it at exactly the same place where agricultural education should start-with the farmer himself. I shall be pleased, therefore, if you will concentrate



R. W. Gregory

your attention for the moment upon not only one farmer, but upon the whole six million of them. For there are, as you know (according to the United States Census) something in excess of six million farmers in the United States at the present time, and agricultural education as such, and vocational education in particular, was chartered as a service to all of them. What would it mean, therefore, if all of those responsible for formulating the programs and policies of vocational agricultural education were to act upon the concept that the adult farmer is the keystone around which the program should be built; that upon the basis of such a concept, success in agricultural education will be sought? As for myself, I would be thoroly content to rest the case for agricultural education on what it represented ultimately for the adult farmer.

Point of View Necessary

I would like to suggest that there are at least three implications in this statement for agricultural education. It is not enough for us to say that we shall start our program centered around the six million farmers in the United States, but we shall find it necessary to indicate with a relative degree of clarity, first, in what direction we propose to go; second, to what breadth and depth we intend to execute our plans; and third, to what ends we finally hope to go with them.

This approach implies a comprehensive attack properly co-ordinated and integrated, such as has been heretofore all too frequently missing. To do this means the abandonment of a piecemeal approach to the agricultural education problems of the farmers of the nation.

The farmer is concerned primarily with three things: his family, his farming, and his farm. If we in agricultural education are to be of greatest service to him, we must also be concerned with him for these three needs. If we are to succeed, we shall have to build what we

the Farmer, his Family, his Farming, and

If agricultural education has done anything at all in the 25 years of its existence, it certainly has emphasized the farming program of the farmer as he has attempted to carry it out on his farm. It is not my intention, therefore, to discuss these two aspects of his interest. Most of what I have to say from now on will be concerned primarily with the problems of the farmer and his family.

Farmer and His Family

Time was, in the heyday of expansion, when new lands were available for the taking and clearing, when a farmer's wealth grew in proportion as his family grew, particularly if he were fortunate enough to get at least an even break in the number of boys as compared with the number of girls in the family, and fortunate indeed when he had a preponderance of sons. The more children he had, the more acres he could clear, the more land he could cultivate, and the more commodities he could produce, the greater was the wealth accruing to him. We have seen most of that period come to a close, and it has become fairly well established that not more than half of the young men and young women reared on farms today can hope to continue their lives as farmers. It has become increasingly clear that for great numbers of these young men and young women there is not much opportunity for even an enriching work experience for them while they are growing up. For agricultural education to act, however, on the assumption that the farmer and his wife are more interested in and concerned with that one-half of their family which may farm than the other half which may not, is unwise. For agricultural education to organize its program around the interests and opportunities of that young man who can and wants to find an opportunity on a farm and totally disregard the presence and the needs of his brother, who neither wants to nor can farm is both unwise and short-sighted.

The Farmer's Daughter

It is becoming increasingly clear that it will be necessary, in the future, to give particular attention to the farmer's daughter. Farming is a family affair, and perhaps the most indispensable member of the family is the farmer's wife. Her attitude and ideals, her strength and grace, her faith and loyalty are of paramount importance to him as he struggles to succeed with the problems of farming do on these same interests. That con- and farm-family living. Agricultural edstitutes for us what I choose to call the ucation must take cognizance of this fact as it attempts to organize complete

and comprehensive programs of agricultural education of the future. I do not mean to imply by that that the sole responsibility, or any particular share of the responsibility for the education and training of the farmer's daughter, and eventually the young farmer's wife, is the responsibility of the agricultural education service; I merely intend to point out that, as a member of the farmer's family, she must be reckoned with if a program in agricultural education designed to be of service to the farmer and his family is to succeed.

Conditions Have Changed

There was a time when farmers acting independently could succeed, even tho their neighbors living on adjoining farms failed. A generation ago farming was perhaps the most individualistic occupation in this country. That time has passed, and only as farmers are able to get together in an intelligent co-operative way and arrive at sound, constructive judgments, can they hope for satisfactory solutions to many of the problems of farming. If this be true, then not one farmer, or a few farmers, but all farmers must become and remain students of their problems and be able to react intelligently to them.

The Adult Program

Just what this means to agricultural education can be revealed best by taking a look at the record. Those who claim to know seem to think that on the average we have a completely new set of farmers in this country about every 30 to 35 years, with six million farms being manned by something slightly in excess of six million farmers. We have, therefore, a turnover of approximately 200,000 farmers each year. The statistical records of the agricultural education service of the U. S. Office of Education show that last year vocational agricultural education enrolled 197,508 adult farmers in evening schools, 52,469 out-of-school young men in part-time classes, and 330,143 high-school boys in all-day classes. The approximately 200,000 adult farmers enrolled represent three and onethird percent of the farmers referred to in the six million mentioned above. On the basis of what is being done currently thru systematic instruction in vocational agriculture for adult farmers, in the parlance of the frontiersman, agricultural education has just about reached the foothills of the Allegheny Mountains.

Part-Time Program

The span of years over which the parttime group spreads is approximately cight. If we were to divide the 52,469 D. L. MACDONALD, Federal Agent, Agricultural Education

THE 23rd Annual Conference of the Pacific Region was held in Cheycnne, Wyoming, May 4-8, with representatives from all the states in the region attending. The territory of Hawaii was unable to send a representative. The objective of the conference was to discuss ways and means by



D. L. MacDonald

which vocational education in agriculture could adjust its program to meet efficiently the changes brought about as a result of the war. The conference was organized on a discussion basis. Committees were appointed to summarize the discussions and make recommendations to the group for each topic discussed.

In regard to what changes in emphasis should be placed on the six major objectives of vocational education in agriculture to meet the present situation, a composite scoring by the supervisors and teacher-trainers of the western states showed that they would place more emphasis at this time on the following objectives: produce farm commodities efficiently, manage a farm business, and maintain a favorable environment. Altho

making a beginning or advance in farming, marketing of farm products, and conservation of soil and other resources are still important, the group indicated that the emphasis on them will be lessened due to the emergency.

It was the opinion of the group that more emphasis will be placed on adult evening classes and less on the all-day classes. More attention will also be given to the training and supervision of the training of farm labor to plant, cultivate, and harvest those crops that are so vitally needed in the war effort.

The conference considered a list of activities that should be reduced in importance or eliminated from local and state programs. This included contests, fairs, and other extra-curricular activities that are far removed from aiding in the war effort.

The committee on problems in connection with the training of teachers in the present situation found that there will be a need to secure 100 qualified teachers in addition to those being trained in the regular channels. This means that some departments in the region may have to be closed if replacements cannot be obtained from the following sources:

a. Return of school administrators who were formerly teachers of vocational agriculture to a part-time load as teachers.

b. Return to employment as teachers of vocational agriculture, agricultural col-

lege graduates or former teachers of vocational agriculture who are now employed in other fields.

c. Having qualified teachers conduct classes in two or more near-by schools. d. Speed up the technical training in colleges so that juniors may be qualified.

Ways of preventing teacher losses were discussed and it appeared that increasing the salaries of the teachers would be one of the most effective methods of solving this problem. It was also suggested that due to the changing emphasis to meet the war situation, resident teacher-trainers will be required to be particularly alert in providing increased amounts of teaching material and, within the limits of travel allowances, provide increased itinerant service.

For the first time in a number of years, the agriculture and home economics services met in joint session to discuss ways and means of correlating the activities of the two services in an effective farm family living program. Among the recommendations submitted by this committee were the following: (1) That the farm family as a unit be taken as a basis for emphasis, (2) that evening and parttime programs in vocational education be appreciably enlarged, and (3) that vocational homemaking and vocational agriculture as applied to all-day groups on a school unit basis receive relatively less emphasis.

Time was spent in working out specific methods by which the farm-machinery repair, farm commodity production courses, Victory gardens, and farmlabor training programs could be developed more efficiently.

young men enrolled last year equally among the eight years' spread for the group, we would have an average of 6,558 in each year's age group. On the basis of this computation, it would be fair to assume, therefore, that each year 6,558 young men leave the part-time age group and graduate into the adult farmer group, that is, actually go into farming on an independent adult basis. According to our estimates previously arrived at, however, we have no less than 200,000 young men going into farming each year to replace adult farmers who have left the occupation. Assuming, therefore, that all of the young men enrolled in part-time classes in vocational agriculture actually go into farming, it would appear that the annual contribution of the vocational agricultural education service amounts to three and twotenths percent of the total number entering the occupation.

All-Day Groups

If we are to assume that all of the 330,143 students enrolled in all-day classes in vocational agriculture remain in high school for a full four years, we shall have to conclude that on the average 82,536 of these students leave the day school each year. Most of the studies of placement in agricultural education show that approximately 50 percent of the boys who enroll in all-day classes in vocational agriculture go into farming. In other words, 41,268 of these who leave vocational agricultural all-day classes annually go into farming. A like number seek entrance into other occupations. This represents approximately one-fifth

of the total number of individuals (the above-mentioned 200,000) who go into farming each year in order to replace the adult farmers who leave. It would appear, therefore, that presentday vocational agricultural instruction thru all-day schools is supplying approximately 20 percent of the individuals needed annually for the farming occupations. If vocational agricultural education in the public schools had the sole responsibility for training all of the individuals who go into farming and for keeping them constantly serviced with agricultural education programs, there would need to be enrolled annually 1,650,000 high-school students in all-day classes, another 1,650,000 in part-time classes, and, of course, all of the six million farmers in evening schools. This gives the rather significant total of 9,250,000 individuals needing some kind of vocational agricultural instruction annuallywhich is only about 18 times what we are doing now.

We still have left unsaid anything with respect to the kinds of service that need to be made available to those farm young men and young women who shall never have an opportunity to be counted among the six million we have been discussing. Perhaps there are those among us who think that we have no responsibility for the welfare of these individuals inasmuch as they are not going to enter the occupation of farming. There are others, however, who are in agreement with the idea that it will not be possible for the young man and young woman who are going into farming to solve their problems of placement unless at the same time their brothers and sisters who will not

and can not enter the occupation are able to find some solution to the occupation problems that face them. As has been indicated previously, the farmer, any one of the six million, is just as much interested and concerned with the welfare of the one-half of his family who cannot follow in his footsteps as he is with the one-half who may; and by and large, he will not be disposed nor able to make any grants of privilege or advantage to the young man who wants to go into partnership with him and at the same time see the occupational problems of the other son remain unsolved.

Those in agricultural education have as much, and perhaps more, at stake in this issue than any other educational group. If we reflect upon the difficulties with which we were faced because of the "dammed-upness" of farm youth incident to the depression, we begin to understand what it may mean to the progress of agricultural education for such a situation to become a permanent fixture in the social and economic pattern of our rural life,

OSY Program

I am optimistic enough to believe that there is one promising development on the landscape of educational effort as it relates to this particular portion of the out-of-school rural youth group. I refer particularly to the out-of-school rural youth defense training program, better known to all of us as the OSY program. Important as this program may be as an adjunct to the present program of defense training for industrial occupations,

Methods of Meeting Farm Labor Shortages

HAROLD O. WILSON, Regional Supervisor. Bureau of Agricultural Education, California

IT IS probable that in no part of the nation will the shortage of farm labor be more acute than in California, and it is with this conviction that the vocational agriculture teachers and administrators in California are carrying out plans to meet this certain emergency.

The principal reasons for the extreme shortage of farm labor are as follows:

1. California produces huge quantities of specialty crops, such as lettuce, asparagus, tomatoes, peaches, grapes, green peas, and melons, which have a very limited harvest season. These crops call for "peaks" of labor.

2. More than one-tenth of the war industry contracts have been placed with California firms, creating a labor demand within the state which has drained the rural areas of thousands of young men.

3. Considerably more than 100,000 Japanese have been evacuated from the state to non-productive centers. Their farming programs are being continued by neighbors and other lessees, but their labor is gone.

4. In past years, farmers in fruit and vegetable areas depended partly on itinerant harvest crews which traveled by automobile from county to county, following the crop seasons. Most of these people are not only permanently employed now either in year-around agriculture or industry, but no longer have the tires to move from place to place.

mediately evident that the 10,500 vocational agriculture students in the state could in themselves do little to relieve any labor shortage because they were all desperately needed on the home farms. It was equally evident that the principal untapped labor pool was the thousands of young men and women attending schools or colleges, not living on farms

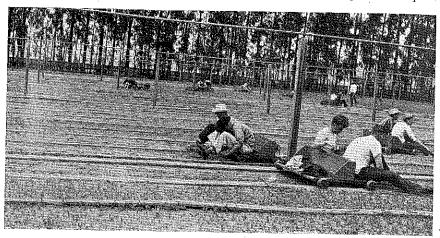
and having no permanent employment. Early meetings of the State War Board were concerned with where the labor

1. Working with the labor committee of the war board for each county in making surveys of anticipated labor needs.

2. Assisting the United States Employment Service in co-operation with the school administration in registering school pupils who would be available to accept farm work during vacation periods or peak employment periods.

3. Working with school administrators in establishing and conducting training courses in farm skills for adults and urban youth when such training can meet a definite need.

4. Assisting as far as possible in supervising school-age workers on the job until they have attained some skill, or until the employer can provide adequate



High-school students pitch in to help solve the rubber shortage. They are setting guayule seedlings



High-school labor hoeing lettuce. This district ships out 20,000 carloads of Iceland lettuce annually

As a result of these conditions, California's billion-dollar agricultural industry early appealed to the high-school vocational agriculture teachers to take steps toward the solution of the problem. Weeks before Pearl Harbor, vocational agriculture students had stepped in to save crops threatened with destruction by lack of available labor.

Agricultural Boys Contribute Labor

After the war broke out it was

shortage would arise. This was difficult to determine, since the harvest peak in August, September, and October might find a situation greatly changed as to the number of men called into the army, possibility of deferment of existing agricultural workers, and similar problems.

Responsibilities of Vocational Agriculture

Later meetings helped to determine the responsibilities of the vocational agriforeman instruction.

The first actual operations along these lines brought many problems. Land owners and producer groups, most concerned with getting the work done, assumed that the teachers would recruit the workers, train them, transport them, and finally act as foremen on the job. This the vocational agriculture teacher would have been glad to do, were it not for the fact that he had a full-time job already supervising a large group of student farm producers; and that while it might be comparatively easy to get an individual to transport and supervise the student laborers, it would be impossible to get some one to carry on the essential vocational agriculture teaching. In many instances, vocational agriculture teachers did drop their entire regular program for days and weeks at a time, to save crops.

Thus far, vocational agriculture teachers have been working with their own and non-vocational agriculture boys, primarily in towns serving the rural areas. In a few of the larger centers—cities from 10,000 to 40,000 located in regions where harvest peaks exist-much needs to be done with these groups.

Urban Labor

The big source of untapped labor

Student Workroom as a Teacher-Training Device

R. W. MONTGOMERY, Teacher Education Auburn, Alabama

SOMEONE has said that if he were starting a university he would first build some dormitories with spacious lobbies, well furnished with comfortable chairs for the students, and that every encouragement would be given to informal group discussions or "bull sessions." Then, if he still had some

R. W. Montgomery

money, he would build a library, then some classrooms, and if there were any money left he would employ some pro-

This old, but little heeded, philosophy of education has been employed to some extent by the teacher-training department at the Alabama Polytechnic İnstitute at Auburn, by the establishment of a student workroom. The idea has been

changed somewhat by bringing the students, the books, and the professors together in the same room.

Location of Room

The location of the room adjacent to the offices of the teacher-trainers and supervisors greatly facilitates a closer association between the students, their teacher, and their future supervisors. The trainees use the workroom as a kind of headquarters or student center where they can stop between classes for a few minutes to study or to have a short "session" with a classmate, or perhaps a word with a teacher or supervisor. Lesson assignments and teaching materials may be prepared for practice teaching under the supervision of the teacher-trainers. Two NYA students are responsible for keeping the room open four nights a

Room Equipment

The materials and equipment in the

room are filed according to the standards for vocational agriculture departments in the state. A complete bulletin file, subject matter files, office files, magazine rack, and visual aids are included. The latest books pertaining to vocational agriculture are put on the shelves for the students to examine and use. Drawing supplies, stencils, slide binders, and other material necessary for preparing visual aids are available. A complete file of Agricultural Education Magazines is kept. The research shelf includes copies of theses prepared by agricultural teachers in Alabama as well as abstracts from outstanding studies from other states.

The Use of the Room

Classes in Conference in Agricultural Education and Vocational Education are held in the workroom. The students in these classes keep a bulletin board as recommended in the state standards, learn to prepare materials, and help in keeping the latest references on file. The room is also used as a headquarters for the collegiate chapter of Future Farmers of America. Their office files are kept in the filing case corresponding to the highschool chapter files in all state departments, thus acquainting trainees with their future duties as advisers.

Having a central headquarters for all (Continued on page 56)

from the field of placement. There are many problems not yet solved, such as satisfactory transportation, housing, and social supervision of young people working in the harvest.

Back of this there has been a general apathy on the part of California city youth toward rural labor. This attitude has probably been caused by the long history of farm labor in the state-a continuous succession of alien importations as the big fruit and vegetable interests moved from Chinese to Japanese, Japanese to Filipino, Filipino to Hindu, Hindu to Mexican, and then to American-born Negroes and dust-bowl refugees. A comtempt for farm labor as demeaning and an urban class-consciousness have been bred into California city children for generations.

To work with city school officials, to change the attitude of these youngsters, and give them an understanding of the work to be done on farms is a job for the state vocational agricultural administration, rather than any local vocational teacher. The move has the backing of

farm organizations, the United States Department of Agriculture, War Board for the State, and city Chambers of Commerce. Unfortunately, it is a move which cannot be put into operation overnight.

No one can say with certainty, as the harvest approaches, how critical the situation may be this year. Everyone agrees that it will be extremely serious by the fall of 1943. This leaves not more than a year for the educational program to operate in the city schools, for housing and social supervision to be provided, and transportation arranged.

Co-operating With Urban Schools

The state vocational agriculture administration has accepted the responsibility of endeavoring to provide materials which will enable the city schools to present agricultural labor in a more favorable light and to give the city youth some insight into the job requirements. This will call for a maximum of reference and visual aid material-slides, pictures, government bulletins, visits to markets in the city, demonstrations by machinery firms at the school grounds, and similar suggestions and helps.

In steps taken to date, excellent cooperation has been extended by all agencies. The state supervisory staff for vocational agriculture has been asked to participate in the meetings of the subcommittee on farm labor for the State War Board. County "key teachers" of vocational agriculture, who are the spokesmen for all vocational agriculture in their counties, have been invited to sit in with the county war board.

It is generally agreed that the special skills needed to thin peaches, cut asparagus, sulphur grapes, or cut apricots for drying, for example, can be learned only on the job. Boys living in the cities serving rural areas will have an opportunity this year to learn many of these skills before the 1943 crisis is reached. Those living in cities can be only superficially "coached" until they get on the

Schools are also co-operating in the farm-labor shortage by:

1. Permitting operation of school for the minimum legal day only during harvest peaks, giving students half-days in which to work.

2. Closing school entirely, or shifting vacations to permit maximum work.

3. Permitting seniors to leave before the end of the semester.

It is considered probable that many schools will not open until late this fall and will make up the time by operating six days per week thru the winter.

Whatever may be the outcome or the method, California vocational agriculture teachers and administrators stand behind the crop production program in the State for the victory of the Allied Nations. There is not an individual who will not bend every effort toward that goal. One of the big problems is to know



Supervised Practice

Follow-up Program in Vocational Agriculture

JOHN G. GLAVIN, State Supervisor, Massachusetts

AT PRACTI-CALLY every educational convention today the question of guidance receives a prominent place on the program. Today the vocational agricultural follow-up program, if properly executed, is synonymous with a guidance program,



J. G. Glavin

and those states that have a sound followup program in operation are far ahead of the times.

The key to the effectiveness of this follow-up program is the preliminary step of preparation for teaching and supervising which includes long-time project planning, yearly planning of the project and budgeting, with each checked as time progresses. The individual lesson and the teaching of a single job must be planned to tie up with the project and supervised farm work program outlined for each individual. All these should be aimed toward a certain definite establishment opportunity.

The type of program planned will be dependent upon the student's desires, his home conditions, aptitude, mental ability, and the opportunity for placement.

Making Survey

Before this planning can be done effectively, the instructor must be aware of the farming opportunities in the area. Some type of survey must be conducted to obtain this information, which should be checked periodically and kept up to date. Such establishment opportunities are as follows:

1. Opportunities to work for wages for a good farmer.

2. Opportunities at home to work for wages or to establish an enterprise.

3. Opportunities to rent farms. 4. Opportunities to buy farms.

If opportunities for establishment are not available within the patronage area, opportunities more remote must be found.

Too often have we disregarded the fact that it is our responsibility to discover and check continuously the opportunities for farming in our area if we are to assist our students to establish themselves in farming. The greatest opportunity of farm boys will be found at home.

With a definite placement objective in mind and a plan for instruction and supervision carefully outlined, the supervisor has a yardstick at hand to apply along the way to discover how far we

will determine whether we have arrived.

The survey of the home farm and consultation with the parents at the time of enrollment and subsequently should show whether or not a plan can be drawn up by which the boy may be established on the home farm at a satisfactory wage, with an income from one or more enterprises, or as a partner.

If establishment at home is not feasible, then the plan devised must aim toward one of the other known opportunities open to him in the area. A survey of the possibilities offered by the area is prerequisite to such planning. The men who are to employ our graduates must be contacted so that we may know the type of training these boys should receive.

Such a survey was conducted by the three agricultural instructors in Barnstable County, Massachusetts. In this county there is a splendid opportunity for employment as caretakers or skilled workers on private estates.

The instructors personally contacted each estate owner. The total places visited numbered close to 400. They found out the number of semi-skilled and skilled workers that were employed, the estates that were willing to employ both undergraduates and graduates, and the type of training the students must receive if they are to hold successfully the positions obtained. With such knowledge at hand a satisfactory course of study which should lead to establishment can be formulated.

Planning Course of Study

The community survey as to types and systems of farming which have proved most successful is a splendid basis on which to plan the study and supervisory farm work of the boys who may be able to reorganize their own homefarm programs so that they may become established at home. This community survey also helps to plan the programs of those boys who may be in a position to rent or buy farms. Such plans, based on this sound foundation of known facts and proved enterprises, have a better chance for fulfillment than any others.

The results brought out by a community survey may be taken also as the basis for planning part-time or evening courses for adults and graduates employed as wage earners but who intend to better their positions by renting or buying farms.

The course of study, the project, and supervised farm work program, must yearly be linked to the plan for establishment. An academic approach or a haphazard plan cannot lead to successful placement and, therefore, defeats the basic principle of the follow-up program. Instruction in a lot of things without a

ter how good these things studied may be, lengthens the period at which satisfactory establishment takes place and makes more difficult the after school follow-up. Therefore, the boys' instructional and supervisory farm work program must be planned wisely, based on known facts, and must have a definite objective.

Basic Principles of After-School Follow-up

Dr. Rufus W. Stimson, Supervisor-Emeritus, Massachusetts, published his 10 basic follow-up principles in the Agricultural Education Magazine some time ago. Eight of these principles, enumerated below, have been the basic commandments of the master teachers in Massachusetts in their after-school folow-up program.

1. The follow-up of former vocational agricultural students should be personal and should result in continuing instruction as assembled or unassembled part-time or evening-school work.

By such personal contacts the instructor is aware of conditions as they are. His observations may make apparent faults unseen by the student.

Pictures should be taken to show "before" and "after" scenes. Such pictures help to bring out the facts in each case and prove invaluable as teaching aids.

Letters sent occasionally also help to cement a bond between the graduate, the teacher, and the school. This is true especially if such letters contain helpful information or interesting news.

2. The follow-up facts should be recorded. In Massachusetts the Life History Folder allows for the filing of facts on, as well as in it. That is one reason why a folder instead of a card is used in Massachusetts for each student admitted.

These recorded facts become the property of the school and are of vital aid to succeeding teachers. They also give facts for the analysis of results. The establishment record of three departments recorded at the end of this article were obtained from Life History Folders.

3. The follow-up facts should be used in teaching. The analysis of results obtained by the former students allows the checking of experimental data. The facts covering problems and their successful solution are the finest teaching material obtainable. Alertness to this opportunity in the follow-up program, with the resulting improvement in teaching, justifies the most painstaking efforts.

The follow-up for facts needed to improve teaching prevents a perfunctory approach and should result in the contact's proving of mutual benefit.

4. The follow-up facts should be used in course making. The records of successful graduates help to stimulate interest. The Jollow-up information can be used for guidance in course making. This information is far more satisfactory than that which might be obtained by a poorly conducted or out-of-date local survey.

From observations made and accurate information obtained, enterprises and R. E. YOUNG, Teacher, Prospect, Ohio

THE following statements concerning Milton Fox and his program of farming are to amplify some of the trying experiences he has labored under while developing and preserving all that he and his mother have at the present time. Not enough can be said of the way in which Milton carried on thru trials that would test anyone's worth to society.

Faces Misfortune

In April of 1935, when Milton was in the 8th grade, his father and his 15-yearold brother were killed while crossing the railroad tracks in their auto at Cardington, Ohio. Milton and his mother were also in the same car. Milton was the only one who was spared without serious injury. His mother was in the hospital for about two months following the accident. During these two months Milton staved with his uncle, C. E. Fox, and commuted to and from the home farm. He did all the work, attending crops and livestock during May and June of 1935. Milton's mother was unable to do any work for over a year. During this time Milton cared for his mother, did the farm work, the work about the house, and had all responsibilities of the home during his freshman year in high school, 1935-36.

Since June, 1935, Milton has run the farm, assumed all responsibility as far as work was concerned, and attended high school 180 days out of each year. He went out for track and basketball during his freshman year in high school. He had to give up athletics because of its compet-

completely reorganized, or rejected.

are we to forget the less fortunate or the

boys who have left school. We never

know when the spark to go ahead and im-

prove himself may hit a boy. The gradu-

ate may have a more or less well-worked-

out plan, but generally the boy who left

school has not and unless contacted and

encouraged may flounder and be lost.

cess have come about with students con-

sidered by some to be hopeless. The con-

tinued interest of the teacher in their

well-being was all that was needed to

The follow-up of all will help us to

keep our courses, methods, and objectives

right, and to check more carefully the

farming aptitudes and prospects of the

pupils enrolled in our agricultural schools

6. The follow-up should be for life. This

seems a large order and indeed it would

be if an instructor did not chart the form-

er pupils as to the amount of contact

needed. Once a year may be all that is

needed for some, while others will need

Farming is changing continually.

Alertness on the part of the instructor

may save from disaster some young man

not as yet able without guidance to think

7. The follow-up should help recruiting.

Brothers of former students, as well as

sons, have been guided to the vocational

agricultural department due to their

contacts with the instructor while on his

start them off.

and departments.

quite frequent attention.

or plan for himself.

Some of the most striking cases of suc-

5. The follow-up should cover all. Too apt

ing for time necessary to run the farm. As a student, Milton is one of the most reliable and consistent boys I have ever had in my 10 years of teaching experience. He is reliable and always completes everything he starts. He is well respected by others of his group.

Begins Farming

Milton has had experience in every phase of farm management during the past seven years. He kept careful and accurate farm accounts which give a true picture of the whole farm setup. His project program might have been larger, but considering his setup plus what he has gone thru, I have no apologies to make. He has operated the entire farm, constantly improving the quality of dairy cattle, hogs, and farm crop practices thru the use of certified seed and purebred livestock. He has remodeled the barn, built new buildings, painted the buildings, erected new fence, applied lime, put in draintile, rearranged field layout, set aside a wild-life protection area, along with running the farm business, keeping out of debt, and increasing the size and volume of his business.

Works Hard

He works harder than a boy of his size should work. A testimony of any of his neighbors will reveal this fact. He believes in the future of farming and is now mapping long-time plans and practices which he expects to incorporate into his farming program in the future. Since graduation from high school he has been looked to as a natural community leader, ever willing to do more than his part. He is President of our Young Men's Farming Association at the present time. The entire county and community look to him, knowing that he will live up to the confidence placed in him.

The \$150 cash award Milton received as Star Farmer of the North Atlantic Region has been invested in buying a purebred registered Holstein bull calf and a purebred registered Hereford heifer calf. These he plans to use as foundation stock in improving the dairy herd and in building a herd of purebred beef cattle. He already has a herd of purebred registered Hampshire hogs.

Milton is a recognized farm leader. He graduated third highest in his highschool class. He is past president of his local F.F.A. Chapter, President of Marion County F.F.A., member of Marion County Junior Fair board, and an outstanding public speaker and parliamentarian. He has always been an active leader in the church.

Milton's high-school supervised practice program consisted of 10 sow and litters with official Ohio ton litter production, baby chicks, standard bred laying hens, dairy herd management, hybrid corn, certified wheat, potatoes, oats, orcharding, clovers, farm accounts, and home beautification. He had a total labor income of \$2,028.

Today his farm has an inventory value of about \$5,000. Recently he was selected All-American Farm Boy of 1941 in competition with five other outstanding young farmers of the United States, thus climaxing a long list of agricultural achievements.

The follow-up of former pupils should make the instructor a more competent judge in admitting or rejecting would-be

8. The follow-up should help in arousing, stabilizing, and improving public support of the Vocational Agricultural Education program. Should criticism arise, or means be taken to curtail the work of the school, it would not get very far as the continued service rendered to former pupils would speak for itself.

The information that would be at hand, due to a well-conducted follow-up program, would refute any attempt to discredit or affect in any way the department or school.

Below is a chart showing the status of all former students with one or more years

of training. The figures are given for three Massachusetts departments that have been in existence 20 years or more.

You will note the largest percentage of former students with "enterprises at home" and as "managers" in the figures for Department C. I feel that such was the result of adherence to a well-planned follow-up program that started when the student was first contacted.

Also in Department "C," those employed as "laborer with specific wages" have plans for establishment as "owner and operator." Employment with specific wages was necessary for some, due to lack of funds with which to purchase a farm. Others came from farms too small to allow for "income from one or more

Status of All Former Pupils in Six Phases of Establishment	Depart- ment A (Percent)	Depart- ment B (Percent)	Depart- ment C (Percent)
Laborer with specific wages	17	24	25
more enterprises	1	1.5	15
3. Partner in farm business	3	10	8
4. Renter and operator	1	0.7	0.5
5. Owner and operator	10	10	10
6. Manager of farm for another	1	1	4
Total of 6 types of establishment	33	47.2	62.5
At home with definite or indefinite allowance.	10	21	10
Percentage farming full time	43	68.2	72.5

Farmer Classes

J. B. McCLELLAND

W. H. MARTIN

Functional Education Prepares Rural Youth*

FRANCES HARTUNG, Instructor in Homemaking, and GORDON R. STIEN, Superintendent of the Dunn County School of Agriculture, Menomonie, Wisconsin

F THE men and women of tomorrow are to succeed in a world of uncertainties, they must today be educated to meet constant changes. If they are to find peace and happiness in a world that has gone mad with war, it is more important than ever that they learn today to recognize the values of wholesome living. If theirs is to be a rural environment, they must learn, as is often forgotten, that these values can be satisfactorily achieved in the rural home.

Around this philosophy of education there has been built at the Dunn County Agricultural School a course in rural living for its senior members, both boys and girls. After three years of experimenting with this type of education, the general reaction is a feeling of assurance that boys' and girls' values can be incorporated in one course to enrich definitely their fourth year of school.

Purpose of Course

The course is designed to help older students in a transition from the adolescent to the adult viewpoint and to acquaint them with understandings and appreciations not dealt with in other courses in high school. It is considered particularly valuable because it deals constantly with both masculine and feminine viewpoints. It puts special emphasis on partnerships and the conferences and intelligent compromises necessary in such partnerships in family living. It also aids youth in learning to weigh values of various standards of living and in learning to live comfortably and happily on a limited budget.

In order to organize this course, a thoro study of the boys and girls in school was made to discover under what conditions they were living at present and what appeared to be the probable futures of those who were graduating. With this information in mind, units were designed to meet these present and future needs. A list of all educational agencies and resources available in the county was com-

As stated in the introduction, the philosophy of education for rural living is centered mainly on two major aspects:

1. The value of wholesome living to be achieved in the present rural home.

2. The need for education for change. In working with and studying rural people, one unconsciously accepts this philosophy for rural youth before and after marriage.

Units Developed

Some of the units included in the

Youth's Responsibility to the Commu-

Home Recreation and Hospitality
Home-Ground Improvement
Choosing a Vocation

Immediate Part-time Employment for High-school Youth

The unit on "Youth's Responsibility to the Community" includes recreational and health needs in the respective communities. "Immediate Part-time Employment for High-school Youth" has included the organization of either a Community Service Bureau or a Co-operative. This year, upon recommendation of the State Motor Vehicle Department, a unit in "Driver Education" was also incorporated.

Part-time Employment Problem

Besides the unit "Immediate Part-time Employment for High-school Youth," probably the most interesting units have been:

Economic Considerations Involved in

sale of articles made by students in their spare time.

Choosing a Vocation

The high light of the unit on "Choosing a Vocation" was the actual experience in applying for a job. Conferences for students were arranged with various businessmen, and cach student had an interview with an employer.

Family Relations

To initiate the study of family relations, this year's class was asked to list what they considered the major problems families are facing now in wartime. Tabulations showed that the students believed these to be mainly problems concerning family finance; the education, care, and guidance of children; farm operation and upkeep in wartime; getting along together and having fun together at home; and problems related to national defense.

How to manage budgets in the face of rising living costs seemed to be the chief concern. Groups of students worked out budgets for an imaginary family on four different income levels. They chose to plan all of the annual expenditures around \$1,160, which is the annual income of the average family in the United



Rural youth working at their problems

Establishing a Farm Home Money Management for Farm Families

The Young Adult in Family Life Care and Guidance of Children

Each year the groups have worked out some type of money-making activity based on the principles of co-operation. For two years a Community Service Bureau was formed thru which the members sold their services to people in the community. Several earned money and received benefits derived from participating in a student-community project.

This year the class chose to make hobbies into money-making projects by organizing a "Rural Youth Co-operative". The Co-operative proported the

States, and around \$600, \$900, and \$1,500 incomes. Keen interest was centered in the problem of deciding whether or not the families with lower incomes could afford a car.

The home supervisor of the Farm Security Administration told how her program is designed to help distressed farm families. Her talk made the class appreciate the actual monetary value of a home-produced food supply and the necessity of careful planning.

The unit on "Economic Considerations Involved in Establishing a Farm Home" includes selecting and buying a farm. The farm supervisor from the Farm Security Office and a representative from the Federal Land Bank discussed how their particular agencies helped farm.

people get started financially. So that the girls as well as the boys would have an adequate understanding of the problem, some time was spent in studying basic business terms encountered in renting

and purchasing a farm.

With this completed, the students set up a check sheet for a survey of a farm made from the point of view of a young couple's considering buying or renting. With the check sheet as a guide for inspection, the classes went on field trips to farms owned by the Federal Land Bank to study them as would a prospective buyer or renter.

The field trips also brought to light certain problems concerning housing and its effect on rural people. These discussions were followed by problems pertaining to buying home furnishings and others.

Out of activities concerning establishing a rural home grew some interest in getting along with the family when attempting to carry out proposed plans. Here the primary pupil objectives were to understand the role of the young adult in the farm home, to realize how early training influences a person's later life, and to develop some judgment and ability in ironing out family misunderstandings.

Contributions made by the boys in this unit were particularly interesting. They had no previous training in child care, for example, and their opinions on bringing up children (opinions which were usually of a dictatorial nature) promoted many heated discussions. In several instances students were given a chance to express their views in debates and panel discussions.

Agriculture and Home Economics Teachers Participate

During the first two years of its existence, the rural living class was taught cooperatively by the agricultural instructor and the instructor in homemaking. The teaching was divided between the two instructors, depending on the unit being taught. Some units were taught entirely by one teacher and sometimes the teaching was shifted from day to day.

The two-teacher plan was fairly satisfactory, especially since each teacher had the opportunity to acquire a better understanding of the facts, attitudes, and appreciations developed and taught by the other. However, in order to make a program truly co-operative, the teachers should spend a great deal of time together organizing materials and planning procedures. Since this is a difficult problem in small schools where teachers' schedules are crowded, this year a plan was tried in which the instructor in homemaking took full responsibility for the course.

Under this setup, there still was free discussion between both boys and girls—discussion in which attitudes and cooperative viewpoints were developed which probably would otherwise have remained undeveloped. This is considered particularly advantageous because it is said that out of free group discussion comes superior thinking, even in groups with mediocre ability. However, with only one teacher working with the group, it was quite natural that more emphasis be placed on her major interest rather than on the agricultural viewpoint.

Experience in teaching rural living makes one realize how exceedingly important it is to provide function.

A County-wide Farm-Machinery Repair
Program

THOMAS H. BLOW, County Agent, Caledonia County, Vermont

ARMERS of Caledonia County, Vermont, have had an excellent opportunity during the past winter and early spring months to bring themselves up-to-date on farm-machinery repair work thru the services rendered by their vocational agricultural schools and teachers.

Program County-wide

The county is served by five such schools located in the towns of St. Johnsbury, Hardwick, Danville, Peacham, and Groton. Each school offered repair instruction. Farmers who knew they had a machine that could be repaired and were willing to spend one or two nights a week working on it or finding out how they could repair it at home, saved themselves both time and money by attending the schools.

J. A. Peters of the St. Johnsbury Academy school conducted a class two nights a week at St. Johnsbury, and carried his school of instruction to Lyndonville in the northern area of the county one night each week. Co-operating with Mr. Peters was Earl Fletcher, a dairy farmer, who turned over the use of his farm shop and tools to Mr. Peters and the farmers of the community.

At the Peacham Academy, Harold Cushman, vocational agricultural instructor, offered a course, meeting two nights each week from March 2 to April 8, and covering the care and repairs for such farm machines as the mower, the

plow, the cultivator, and the corn harvester. One meeting was devoted entirely to cleaning, storing, and painting farm machinery.

At Danville, George Martin, and at Hardwick, Francis Marsceill offered similar courses. At the Groton school, Lyle Frazer fitted his repair work into his regular series of adult meetings. All instructors have reported real interest, altho not as many attended as could have been accommodated.

Co-operation

Many farm people not only have been assisted in doing actual work on their own machinery, but also have received a course instruction on such work as forging, saw and tool sharpening, welding, and several of the maintenance problems that go along with farm work. One of the best expressions I heard as to the value of the schools came from an elderly farmer who had taken some special work on forging. He stated that he had never known how to make a forge fire or sharpen such tools as chisels, but even at his age he was able to learn how to do these jobs.

In conclusion I can say that there are many types of work in which we extension agents and vocational agricultural teachers can co-operate; and if we only realize that the field is sufficiently large for all of our efforts, particularly in the present emergency, much greater accomplishments will result.

tivities to make rural education effective. In almost every unit it has been possible to plan some experience that was comparable to a real experience that might be met in everyday living. For example, in the unit on part-time employment, the group actually organized themselves so that together they would be strong enough to carry out their objectives. Other examples of functional activities already mentioned include actual interviews with employers and field trips to inspect farms from the standpoint of prospective buyers or renters.

In the unit on "Home Recreation and Hospitality," the students can actually give the parties which are discussed and planned in class. In discussing "Community Recreation and Health" it is sometimes possible to improve a recreational center and promote real activities, thereby making the rural students' education function.

Students' Reactions

Student reactions and opinions are always most interesting, and they certainly give a teacher an insight into what part of her teaching is really worth while. Afew reactions written by students follow:

"I have learned more of what to expect in life and how to face it. The biggest thing I learned was the viewpoint of different individuals."

"This class has taught me to appreciate the farm a lot more than I used to."

"I have practiced some of the better relationship ideas we studied, and I find

than I did before. The units I liked best are 'Managing Incomes,' 'Family Relationships,' and 'How to Choose a Farm.' "

"In my opinion, I believe a course of this nature will answer the needs of students that other courses did not answer. It offers a wide range of knowledge to the students."

As stated previously, the general result from this course has been the assurance that boys and girls do gain definite values in group discussions of attitudes and viewpoints concerned with rural living. In a period of uncertainties, wholesome family living does have an increasing value. The teachers of agriculture and homemaking as well as others have real contributions to make to this desirable end.

The authors would like to acknowledge the contributions to this course that have been made by the following people:

Miss Letitia Walsh, head of the Home Economics Education department, and Miss Ruth E. Michaels, Dean of Home Economics, The Stout Institute, Menomonie, Wisconsin; Mrs. Eleanor Segerstrom, former instructor in homemaking at the Agricultural School; Mr. Edwin Baker, former instructor in agriculture; Mr. James Pearson, Office of Education, Washington, D. C.; Mr. L. M. Sasman and Miss Martha Rubeck of the State Board of Vocational and Adult Education, Madison, Wisconsin. Their efforts and helpful suggestions are gratefully appreciated.

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Farm Mechanics

Job 3. Check Points for Pitting and

Job 5. Cleaning and Setting of Spark

Job 6. Cleaning the Cooling System

Job 7. Changing Oil and Using the

Job 9. Setting and Adjusting the

4. Cleaning of Impulse Starter

Proper Gap

Plug Gaps

Correct Oil

Brakes

of Electric Motors.

Job 8. Lubricating the Tractor

Job 10. Changing the Oil Filter

Job 11. Cleaning the Air Filter

for the Job

Tires on Farm Machinery.

Wear

Tires

Grain Binder.

Seventh Meeting-Use, Selection, and Care

Job 2. Care of an Electric Motor

Job 3. Controls for Electric Motor

Eighth Meeting-Use and Care of Rubber

Job 1. Selecting Rubber Tires for

Job 4. Adding Weight to Rubber

Job 6. Protection and Care of Rubber

Removing and Applying Rub-

Inflating to the Proper Pressure

Rubber Tires, Breaks, and

Rubber Tires for Belt Work

Job 4. Electric Motor Troubles

Farm Machinery

ber Tires to Rims

Tires for Traction

Job 8. Chains for Tractor Work

Job 1. Threading the Knotter

ter Troubles

Job 5. Repairing Elevators

Job 6. Lubricating the Binder

Tenth Meeting-Mower and Its Adjust-

and Their Causes

Job 3. Register of the Cutter Bar.

Job 2. Cutter Bar Alignment

Job 6. Aligning Guards

Pitman

Job 1. Determining Mower Troubles

Job 4. Adjusting Wearing Plates,

Job 5. Removing and Riveting Sec-

Job 7. Adjustment and Repair of the

Job 8. Removing Crank Shaft and

Job 9. Adjustment of Cutter Bar

Replacing Bushing

Lifting Mechanism

Instructional Procedure

Each class meeting followed a rather

Knife Clips, and so forth

Job 3. Timing the Binder

nism

Ninth Meeting-Using and Servicing the

Job 2. Remedy for Twine and Knot-

Job 4. Repairing the Cutting Mecha-

Job 1. Selection of an Electric Motor

Evening School in Farm Shop

ADRIAN GAMBLE, Teacher, Postville, Iowa

As the summer months of 1942 progressed, the farmers of the Postville community became more and more convinced that it was necessary to repair their old machinery and make it last longer. Fortunately the Postville Board of Education had just added a well-lighted and equipped farm shop to their building which housed the Vocational Agriculture Department. The Advisory Council, seeking to serve the needs of the community, considered several suggested courses but soon felt that a study of farm mechanics for the adult members of the evening school would serve their needs very well.

The course of study was formulated. Jobs were worked out by breaking the course into smaller, teachable units. When all were complete, the outline of the course of study appeared as given in the following brief:

Course of Study

First Meeting-Sharpening the Common Tools Used on the Farm.

Job 1. Grinding and Sharpening the Wood Chisel and Plane Irons

Job 2. Filing the Wood Auger Bits Job 3. Grinding a Screw Driver

Job 4. Filing a Cross-cut Saw Job 5. Filing a Rip Saw

Second Meeting-Finishing and Refinishing Wood Surfaces.

Job 1. Glass Glazing
Job 2. Determining When to Paint Job 3. Selecting Paint

ob 4. Preparing the Surface

Job 5. Painting Equipment

Job 6. Avoiding Painting Errors Job 7. Applying Paint

Job 8. Removing Old Paint

Job 9. Application of Interior

Third Meeting—Cutting the Common Raf-

Job 1. Tools Used in Cutting Rafters

Job 2. Terms Used in Rafter Cutting Job 3. Laying Out the Rafters

Job 4. Determining the Rafter Length

Job 5. Roof Types
Fourth Meeting—Tying the Common Knots and Splicing Rope.

Job 1. Selecting and Caring for Rope Job 2. Making Knots and Hitches

Job 3. Splicing Rope Fifth Meeting—Soldering Farm Equipment.

Job 1. Soldering

Job 2. Operating a Blow Torch Soldering Tin and Other

Materials Job 4. Sweating on a Patch and Sol-

dcring Holes Sixth Meeting-Care and Service of Farm

Job 1. Cleaning Grease From the Motor

Job 2. Inspection of the Fuel System

definite procedure; First, a practical job was secured from some member of the class to be brought

Job 10. Storing the Mower

Second, a demonstration of the approved procedure for doing the job was

> Third, questions were answered, all phases of the job discussed, and experiences exchanged by members of the

cured particularly for that purpose.

given by the instructor or someone se-

Fourth, the class broke up into small groups to put into practice the demonstrations they had just witnessed and discussed. The instructor supervised this practice work by watching, offering a suggestion, and encouraging the students.

The plan for each meeting was to have the real job present so that a demonstration and practice by each member could be given. For the first meeting, tools that were in the farm shop were sharpened.

The use, selection, and care of electric motors were demonstrated by the local science teacher, who had considerable experience in maintaining electric motors. Very little of the time for this meeting was spent in practice. A good lively discussion was held. Motors, armatures, windings, commutators, and so forth were passed among the members; and charts showing use, cost, and other factors were studied.

Rubber tires, mechanical tire pumps, both hand and power, were among the items studied at the meeting on Use and Care of Rubber Tires on Farm Machinery. Common tire failures were shown, either by members' tires or charts, whichever fitted the need of the group.

A neighboring vocational agriculture instructor had charge of the demonstration on using and servicing the grain binder. We had hoped to secure the deck of a binder, but could not get it for this meeting. The knotter, however, was secured, and its operation and adjustment were studied. Charts and mimeographed illustrations helped take the place of the missing binder.

A cutter bar was used in the last meeting to show care and adjustment, alignment, register, and filling in new ledger plates. Members of the class used the mower anvil to remove worn ledger plates and put in new ones.

It may be rather difficult to recount just what has happened on every member's farm as a result of this series of lessons, but the following are some of the jobs that have been done.

Results Achieved

1. Four members have installed grinders, both motor driven and hand driven, and plan to use them.

2. Two members plan to paint their houses and barns and to select paint on a composition basis. Others plan to paint farm buildings on their farmstead.

3. One farmer has indicated he had had occasion to splice a rope since our

4. Two members have bought electric soldering irons for home soldering re-

A Continuous Evening-Class Program

SAMUEL F. SIMMONS, Teacher, Maytown, Pennsylvania

HIS year we are conducting the third annual farmers' evening-class program at the local high school. At all three of our organization meetings the following definition of an evening class has been read and explained to those present, especially for the benefit of those who had not attended the meetings in previous

"An agricultural evening class is NOT: 1. A large agricultural group of all ages who meet to be entertained.

2. A gathering to discuss such problems as 'What's Wrong With Farming?' 3. A group that meets to listen to a lec-

ture by the agriculture teacher. 4. A big 'ballyhoo' meeting with lots

of talk and no results. 5. A meeting of the community in response to a general invitation sent out indiscriminately.

6. A series of three or four meetings to discuss one or more varied subjects of interest to several farmers.

But an evening class IS: An organized group of farmers who attend a series of 10 or more meetings, about two hours each in length, to study in an organized way specific farm jobs pertaining to one or more closely related enterprises."

The members of our evening classes have been serious-minded young farmers who have come for the express purpose of learning new facts and skills and solving their own individual farm problems. We profited from the beginning by an experience gained when visiting an evening class several years ago. The members of this particular class sat thru the session, showing very little interest until the time came for playing basketball. We have not adopted an "all work and no play" policy, but we have tended in that direction rather than toward one of "all play and no work." The last meeting of each year's winter series is set aside solely for recreation, refreshments, and a short entertainment. Occasionally the members participate in various sports but recreation is not our feature attraction.

Setting Up the Course of Study

The selection of the year's course is accomplished at the organization meeting. It is almost impossible to select a single course that will meet with the full satisfaction of all members present. As far as possible we attempt to allow the members to choose whichever subject they feel will be most interesting as well

check tappet clearance for his tractor. Sixteen members indicated they planned to be more careful in the daily care of their tractor.

6. Three farmers flushed out the cooling system of their tractors.

One man installed heavier wire to his electric motor in the pump house.

8. One farmer bought a mechanical tire pump to work on the power take-off of his tractor to keep the tires of his tractor and other machines properly in-

9. The school farm shop mower anvil has been loaned to four different farmers weekly evening meetings.

as beneficial to them. It is our belief that it is best to select a unit that is really needed and secure members who are sincerely interested in it and will profit

Following is a job summary of the evening classes which have been conducted during the past three years:

1939—Farm Mechanics and Dairying

1. Organization Meeting

2. Ropework for the Farmer

Splicing Rope Sheet Metal Work

5. Painting and Finishing Wood and Repairing Furniture

6. Some Practical Farm Mechanics Jobs (including glazing, sharpening plane irons, chisels, and auger bits, and figuring bills of materials)
7. Dairy Cattle Judging Instructions

8. Judging Cows and Heifers at Farm of Local Dairyman Testing Milk for Butterlat

10. Diseases of Dairy Cattle

11. Breeding Troubles of Dairy Cows

12. Feeding Dairy Cows

13. Recreational Meeting

1940—Dairying and Farm Mechanics

1. Organization Meeting

2. Feeding and Management of Dairy Calves 3. Feeding and Management of Dry

and Fresh Cows 4. Balancing Rations for Dairy Cows

5. Grass Silage for Dairy Cows 6. Dairy Cattle Breeding and Herd Improvement

7. Selection and Care of Herd Sire 8. Identification and Uses of Shop

Tools and Equipment 9. Making Drawings and Reading

Blueprints 10. Individual Farm Shop Projects

11. Cutting Rafters

12. Construction of Poultry Range Shelter

13. Recreational Meeting

1941—Poultry Management and Farm Mechanics

1. Organization Meeting 2. Brooding and Care of Chicks

3. Diseases of Chicks and Growing

4. Management of Pullets on Range

5. Selecting Hens for Egg Production 6. Grinding Farm Tools

7. Sharpening Hand Saws 8. Sharpening Circular and Crosscut Saws

9. Hardening and Tempering Tool

10. Building a Homemade Electric Brooder

11. Soldering

12. Tractor Troubles

13. Disease of Hens

14. Care and Marketing of Eggs

15. Recreational Meeting Here are some facts concerning our past three evening schools:

1. Our evening schools were conducted for a period of 12 or more consecutive

and continued until April or May.

3. All meetings were held in the agricultural room of the high school or in the farm mechanics shop, with the exception of one at the farm of a local dairyman where the group judged dairy cattle.

4. Our evening schools have had an average attendance of 15 members.

5. The local teacher of agriculture has acted as leader for most of the meetings.

6. Two units have been taught at all of the three evening schools. Farm mechanics instruction has been given every year.

7. Enrollment has been secured by personal solicitation, telephone calls, help of regular members, letters, and newspaper articles.

8. Approximately one-third of the members were operators of farms; the other two-thirds were either partners in the farm business at home or were working on farms away from home for definite

9. The average age of members was 26.3 years.

10. The members showed greatest interest in farm mechanics instruction.

The fact that "the best time to learn anything is when one needs to know it" seems to be the principal reason for the success of most farmers' evening classes. Continual readjustment is very necessary for success in modern farming and implies that one must learn to keep abreast of the rapid progress and the many changes that are being made in agriculture today.

New Service for Teachers

HE Educational Policies Commission is pleased to announce a new service to aid schools in organizing education to meet war needs. In co-operation with the Radio Script and Transcription Exchange of the U.S. Office of Education, the commission has prepared a conference kit based on A War Policy for American Schools. The kit contains:

1. A recording of a round-table discussion by a group of educational leaders on "How Schools Can Help to Win the War."

2. Supplementary printed materials selected from publications of the Educational Policies Commission and the U.S. Office of Education.

3. A manual on the use of the kit, with suggestions for planning programs and information on playing the recording.

Members of the round-table were: Paul V. McNutt, Federal Security Administrator; John W. Studebaker, U. S. Commissioner of Education; Mrs. William Kletzer, President, National Congress of Parents and Teachers; William G. Carr, Secretary, Educational Policies Commission; Edwin W. Broome, Superintendent of Schools, Montgomery County, Maryland. This kit is for school staffs, professional

organizations, summer workshops, summer school classes, and other groups interested in planning meetings to organize and improve the schools' contribution to the war program.

The kits are on loan free of charge from the Educational Radio Script and Transcription Exchange of the U.S. Office of Education. A specially designed carton

Studies and Investigations

C. S. ANDERSON

Rural Youth's Occupational Choice

Versus the Census

E. B. KNIGHT, Teacher Education, University of Tennessee

WISELY selected, the life occupation of a youth probably contributes as much to his happiness as any other single factor. Chosen on a haphazard basis his vocation often becomes drudgery and proves a continual source of irritation which blights both his



E. B. Knight

personality and his worth as a member of society. Because of the significance of the decision and its far-reaching effect, it is imperative that the youth of the nation and the several states be provided with every facility which will further their progress towards an adequate occupational goal.

Philosophy and Facts

The statement made in the last sentence of the preceding paragraph has numerous implications. Foremost must come the adoption of a basic philosophy followed by an analytical determination of the factual situation. Concerned, too, are adequate procedures and the materials appropriate to their usage. The provision of formal training courses, the opportunity for individual tryout and exploration, and the need for systematic counseling are likewise involved. These elements, however, are but the mechanics of a process which can never function successfully without that ever-essential spark, the intelligent efforts of truly interested adults, particularly teachers and administrators.

Farm youths are especially affected, as local opportunities for exploration, vocational training, and guidance are usually far less frequent in rural than in urban territory. Restricted school finances, limited educational curricula, and the comparatively few possibilities for varied vocational contacts and experiences offer serious obstacles to the farm boy who is striving to determine his best occupational prospects. So serious is this all too-common condition that a number of our leading professional writers have urged for several years that this problem be immediately attacked by rural educa-

Relatively few rural teachers delude themselves into the belief that every student enrolled in a particular local vocational class will follow that vocation thruout life. Both administrators and instructors quite generally recognize the ever-shifting supply and demand situation which obviously cannot result in a perpetual balance between employment mittedly, too, a number of students do not possess the physical, mental, or personality qualities essential for a successful career in the area under contemplation. Still others are not interested in the vocation, lack sufficient financial resources for further training, or encounter more attractive opportunities in other fields. Whatever the circumstances, it is quite apparent that many of the youths enrolled in high-school vocational classes are in dire need of occupational guidance.

Occupational Choices of Rural Young Men

A series of studies, involving 1,650 Tennessee rural young men residing in 55 well-distributed communities, were conducted by the Department of Agricultural Education at the University of Tennessee during 1940-41. These investigations included 811 out-of-school and 839 in-school* youths so that the data resulting depict the reactions of essentially equal numbers of each class. A portion of the factual materials assembled pertained to the occupational choices of those participating in the research. For purposes of comparison these items are grouped into four of the more common vocational areas currently found in Tennessee. This information is summarized in Table I.

Taken as a whole, the highest percentage of the rural youths designated industrial occupations as their potential adult pursuit. However, the high rank of this vocational area was largely due to

the replies of out-of-school young men. 44.4 percent of whom favored industrial activities. Just 16.6 percent of the student group named occupations falling within the same category. Farming was well regarded by approximately onefourth of all the youths with no significant difference being evident between inschool and out-of-school respondents. Compared with the non-school group, the student division indicated a preference for professional vocations of eight to one and for commercial work of two to one. On an average, one youth in four was undecided as to his permanent life occupation with a somewhat higher proportion, 28.9 percent, of the in-school individuals being uncertain.

Occupations of Fathers

Each participant in the various studies was requested to name the occupation, if any, of his father. The answers received were not deemed specific enough to warrant as extensive a classification as contained in Table I altho it was possible to group the paternal vocations into the areas mentioned in the next table (II).

Six out of every 10 fathers followed the occupation of farming. A few more of the in-school group fathers farmed but the difference was relatively minor. The same situation prevailed in the industrial area. A surprisingly small number of the student section, 0.4 percent, had fathers who were unemployed while 7.7 percent of the non-school youths came from homes headed by fathers without any definite occupation.

Tennessee Occupational Groups

It should be interesting to scan briefly

TABLE I. Occupational Choices of Tennessee Rural Young Men as Indicated by Members of the In-School and Out-of-School Groups.

Occupation selected	All youths (Percent)	High-school students (Percent)	Non-school youths (Percent)
Industrial Farming Professional Commercial Miscellaneous Undecided	30.2 26.9 7.6 3.5 6.3 25.5	16.6 27.2 13.3 4.7 9.3 28.9	44.4 26.5 1.7 2.3 3.3 21.8
Totals	100.0	100.0	100.0

TABLE II. Occupations Followed by Fathers of Certain Tennessee Rural Young Men. Shown by In-School and Out-of-School Groups.

Occupation	All fathers (Percent)	Fathers of students (Percent)	Fathers of non-school youths (Percent)
Farming	60.1 13.3 15.9 4.0 6.7	61.8 13.4 17.7 0.4 6.7	58.3 13.2 14.1 7.7 6.7
Totals	100.0	100.0	100.0

the recently released 1940 Federal Census data pertaining to the gainfully employed workers of Tennessee. Such data are presented in Table III which, for purposes of comparison, also gives the companion figures for the 1930 Census.

Agriculture is still the outstanding occupation of Tennessee workers despite a 17.9 percent decrease in the total so employed in the 10-year period elapsing between the two Federal Census compilations. Approximately one person in three of the worker groups, 33.2 percent, is now engaged in farming. The second largest vocational area is industry, including manufacturing and mechanical activities; almost one-quarter, 24.2 per cent, of all Tennessee employees earn a living by such tasks. Ranking third, fourth, fifth, and sixth are trade, personal services, the professions, and transportation, all of which require the services of from 5 to 13 percent of the workers of the state. Governmental affairs and mining also employ considerable numbers of

An actual decrease of 1.7 percent is indicated for the grand total employed in 1940 as contrasted to the data given for 1930. Transportation and utilities seem to have lost the most workers, 30.8 percent; agriculture decreased 17.9 percent; mining declined 11.7 percent; and personal service lost 1.8 percent. According to the 1940 census report government and public service led in terms of percentage gained with 91.9 percent; industry (manufacturing, mechanical) increased 16.0 percent; trade hired 14.2 percent more persons; and the professional workers were increased by 9.4 percent.

Youth Choices Versus the Facts

From Tables I and II we learn that fewer than one-half as many youths, 26.9 percent, as fathers currently engaged in farming, 60.1 percent, expected to follow that vocation. No important difference prevailed in the two component youth groups altho the percentage of in-school individuals preferring farming was slightly higher. A far greater percentage of out-of-school respondents, 44.4 percent, anticipated earning a living by industrial activities than had fathers so employed, 13.2 percent. Viewed as a whole, there were less than half as many fathers who were industrial workers as there were sons who indicated a preference for industrial work.

Quite striking, too, are the data dealing with the professional and commercial areas which, according to completed questionnaires, are as follows:

Profes-Commercial sional Percent Percent In-school youths 13.3 7.7 Allied fathers..... Out-of-school youths 2.3 Allied fathers.... 3.6 1.1 All youths..... 7.6 3.5

Allied fathers..... 1.9 5.7 Five times as many high-school boys favored professional occupations as had fathers similarly employed, while the ratio for all youths was 4 to 1. The situation was reversed in the commercial area with one-third fewer youths evidencing a wish to follow in the paternal vocational footsteps. Seemingly, actual attendance at a secondary educational institution had a potent influence on a student's occupational aspirations in as far as the professions are concerned.

By referring to Tables I and III, the reader can make an effective comparison between the youth's occupational selections and the actual worker condition as portrayed in the Census of 1940. It will be observed that the Youth-Census ratios for the various vocational groups are as follows:

Summary Statements

Many conclusions and implications might be evolved from the data presented. In the opinion of the writer, who also did much of the field work, the following 12 items at least are worthy of consideration by youth-minded persons interested in the occupational welfare of rural young men:

1. The selection of a life occupation is a serious problem for rural youth.

2. Industrial occupations are especially attractive to Tennessee rural young men.

3. Approximately the same proportions of in- and out-of-school youths expect to farm.

4. Actual high-school attendance seems to influence greatly youthful aspiration for a professional career.

5. Apparently one young man in every four has no definite plan for his occupational future.

TABLE III. Employed Workers of Tennessee by Occupational Groups. 1940 vs. 1930.

Occumentian	Individuals		Percent of workers		Percent
Occupation	1940	1930	1940	1930	gain (1)
All employed workers Agriculture, forestry Manufacturing, mechanical Trade, wholesale, retail Personal services Professional services Transportation, utilities Government, public service Mining, mineral extraction	313,026 228,642 125,635 97,701 54,096 51,364 23,244	958,209 381,217 197,038 110,025 99,503 49,453 74,207 12,114 16,039	100.0 33.2 24.2 13.3 10.4 5.7 5.5 2.5 1.5	100.0 39.7 20.5 11.4 10.4 5.1 7.7 1.2	-1.7 -17.9 16.0 14.2 -1.8 9.4 -30.8 91.9 -11.7

6. Many more fathers of out-of-school rural youth are unemployed than are fathers of their student contemporaries.

7. No definite relationship was found between the occupations chosen by the youths as a group and those followed by their fathers.

8. According to the 1940 Census, marked worker decreases during the past 10 years have occurred in the occupations of agriculture, transportation, and mining.

9. In the same period (1930–1940) the greatest proportionate worker gains were in government service, industry, commerce, and the professions.

10. The choices of the individuals who designated agricultural, industrial, and professional pursuits compared reasonably well with the current worker situation reported in the 1940 Census for Tennessee.

11. Conceivably, few youths are aware of the expanding possibilities in the commercial area.

12. There is definite need for both vocational guidance and occupational training in the rural secondary schools of Tennessee.

*Students from 16 rural high schools are represented in the departmental studies. About 95 percent of them were enrolled in vocational agriculture classes when contacted.

What Can We Do to Help Win the War?

HENRY ROSS, Teacher Education
Texas A. & M.
College Station

FARMERS are asking teachers of vocational agriculture, "What can we do to help win the war?" Teachers, in turn, are relaying the question to supervisors, who suggest that teachers offer their services to their USDA County War Board Chairmen.

The War Board Chairmen are making four helpful suggestions to teachers of vocational agriculture: First, stimulate boys to increase the size and number of needed food-and-feed projects; second, organize out-of-school youth to assist with machinery-care-and-repair educational programs; third, get the F.F.A. Chapter to enroll and train volunteer farm labor groups among nonfarm high-school students; and fourth, help the USDA County War Board to get outstanding farmers in natural rural communities to assume responsibilities for helping their neighbors make and carry out plans for increased food production. In many communities that are outstanding farmers in poultry, dairy, hog, and peanut production who will be glad to help their neighbors meet their goals.

The things suggested seem relatively simple and easy to accomplish. Yet it is just such simple steps—community by community, state by state—that will generate the mighty force needed to defeat our enemies. Teachers of vocational agriculture, supervisors, and teacher-trainers on the alert for ways of getting the job done will welcome and adapt these ideas to their use—each in his own way. As we continue to face new problems, so shall we continue to turn up new solu-

Future Farmers of America

. W. TENNEY

Participation in F.F.A. Activities

H. D. GARVER, Adviser Merriam, Kansas

PERHAPS no other one phase of a vocational agriculture teacher's work causes as many gray hairs or sleepless nights as that of finding ways thru which boys may be induced to take part in F.F.A. chapter activities. The unpredictable nature of youth has made the answer to this perplexing question virtually impossible. Possibly the silver lining to this cloud is the very background to our American way of living. Maybe it is a blessing in disguise that our future citizens cannot easily be herded into regimented groups. But we as teachers do know that we are responsible for guiding the actions of those under our care, and we often lose sleep because of it.

Member Participation

We would all like to have every boy respond wholeheartedly to every bright idea we think up. We would like to have our chapters equal or excel the records of other chapters. What heaven it would be if every officer performed his duties according to our manual, if every committee chairman frequently called his committee members together and worked out their problems according to radio skits; if every member were on hand for every meeting; if every survey were made 100 percent and on time. But things don't happen that way in this vale of toil and sin

Methods of Adviser

What do we as teachers do about it? Do we scold our boys and carry a sourpuss for them to be inspired by? Do we sometimes jump in and do their work for them so we can fill out a good report next spring? Or do we fall in a rut and just decide that we guess we have a "no 'count bunch' and begin looking around for another school next year? Last, but not least, do we carry home a first-class set of blues to cheer up the wife and kiddies? Paraphrasing Lincoln: "Some of us do all of these all the time, all of us do some of these some of the time, but not all of us do all of these all of the time."

Generalitics add little to the solution of a definite problem. Just now, we are concerned with the matter of arousing our F.F.A. boys to fuller participation in chapter activities. In the hopes that something may be contributed to the cause, let us forget the shortcomings of our boys for a while and see how we, as teachers, are doing our part as chapter advisers. We might ask ourselves some questions, many of which our boys are asking in their own minds about us. Here goes:

1. Does our own personality promote respect and confidence from our boys? Are we safely between the extremes—"just one of the kids" and a "stuffed

F.F.A. Boys Serve Farmers

A. L. MORRISON, Subject Matter Specialist, Auburn, Alabama

THE members of the F.F.A. Chapter in Collinsville, Alabama, are putting forth every effort to assist the farmers in the patronage area of the Collinsville High School. After a discussion in one of the regular F.F.A. Chapter meetings, it was decided to send out letters to the farmers of the community stating what the F.F.A. Chapter proposed to do in order to help in the war effort. Along with this letter from the F.F.A. Chapter president went a four-page mimeographed orchard and garden plan, worked up by the Chapter, showing what could be carried out on the farms of the

According to the letter, the local F.F.A. Chapter is treating cottonseed for farmers at 15c per bushel and "the price is the same as last year." Fruit trees are being ordered and the average saving is about 50 percent on each order. The F.F.A. members will prune and spray fruit trees for 10c per tree. The F.F.A. is collecting scrap iron to buy War Bonds. The Chapter plans to salvage all usable parts from scrap farm machinery and make these parts available to farmers. Farmers are encouraged in the letter to bring their farm equipment to the school shop and repair it. The F.F.A. offers to help them.

Each boy in the chapter distributed a number of the above letters to his neighbors and in this way every farmer in the community received his letter from a personal messenger. As the letter was handed to each farmer he was also given

the four-page mimeographed booklet giving detailed instructions on planting plan and varieties for a home orchard and home garden. This information is also being used by the Chapter members in their individual supervised practice programs. The Chapter plans to send detailed instructions on peanuts to the farmers of the community within the next few days.

The active work of the local F.F.A. Chapter in co-operating and helping in the war effort is being enthusiastically received by farmers, according to Mr. S. G. Black, teacher of vocational agriculture and local F.F.A. adviser.

Student Workroom as a Teacher-Training Device

(Continued from page 47)

agricultural education students is building a spirit of unity. The trainees have more contact with one another and with the faculty. The freshmen and sophomores develop the feeling of belonging to the profession much earlier than formerly.

Still another value not to be overlooked is the help offered to the in-service teachers when they come to the campus for their three weeks' short course each summer. Here they can examine all of the latest publications in their profession, observe a model filing system, bulletin board, and visual aids, as well as have access to the latest research in their field.

other teachers in dress, speech, and conduct? China isn't the only place where a leader can "lose face."

2. Do we delegate responsibility to committee chairmen, officers, and other group leaders, and then take it over ourselves? Who cleans up after an F.F.A. candy concession for a football game? Who really gets the speakers for a parentson banquet? Who makes out State Farmer application reports? Who "presides" at F.F.A. meetings?

3. Do we keep ourselves posted on the activities of members who have assumed responsibilities? Does the chairman of the F.F.A. Battery Broiler Project know that the adviser is keeping tab on how he keeps tab on the squads of duty? Does the chairman of the Milk Testing Committee know that the adviser checks on the work of his committee? Do the chapter officers wait for a prod from the adviser before they get busy? Does the adviser know, at all times, the financial condition of the chapter and the accuracy of the treasurer's records?

4. Do we ever embarrass our boys by public "bawling out"? Are our boys afraid to admit failure to us for fear of a severe tongue lashing? Do we court popularity by condoning any kind of conduct

rowdyism to panty-waist indifference?

5. Do we have a system of merits and demerits? Have we any kind of system for publicly recognizing good work, as well as a system for withdrawing privileges for those who wilfully fail to fulfill responsibilities?

6. Does the gang spirit prevail? Is it our chapter or your chapter? Is it our sheep project or your sheep project?

7. Are our boys proud to be F.F.A. members? Are the snappy official shirts and jackets worn because they are good-looking or because they represent the Future Farmers of America and the Podunk Chapter? Do our boys duck around the corner every time some slick-haired son of a bookkeeper lets out a derisive "Hi, Farmer"? Have our boys pondered on the meaning of the words of the Future Farmer's Creed? Or have they read it yet?

Self-analysis is a mirror. In it we can see the need of a haircut, the need of a clean shirt, the need of a shave, the need of a tailor, and so on. We can say, "What a bum" and go down town for a game of pool. Or we can visit a barber, a laundry, a tailor

Lincoln was right—none of us is all of these all of the time, but all of us are

Factors for Success in a Dairy Production Project

C. Y. CANNON, Iowa State College, Ames, Iowa

THREE things characterize every successful dairyman: he is a good feeder; he keeps accurate records of his operations; he is a student of his business and keeps abreast of all the latest developments in experimentation in his field. Since a Future Farmer is do-

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ing on a small scale what dairymen are doing on a large scale, the same factors characterize the successful young person who is conducting a dairy project.

High Production Means Low Cost

There is much evidence to show that when cows produce at high levels of production the unit cost of production is much lower than when cows are producing at a lower level of production. For instance, last year's record of the Iowa Dairy Herd Improvement Association indicates that those cows which produced as much as 400 pounds of butterfat annually did so at a feed cost of 14.7 cents per pound of fat produced, while the cows producing 200 pounds of butterfat annually produced one pound of fat at a feed cost of 21.5 cents.

Good Management Pays

A recent report from the Bureau of Dairying, Washington, D. C., emphasizes that most dairy cows in the United States are not producing up to their inherited ability. Simply by changing the feeding program, 25 percent or more added milk could be produced from the cows in the dairy herds of the United States. Most dairy cows are being limited in their production, not by their breeding but by the men who feed them. The Future Farmer who is working on a dairy project must remember that the results in condition and production which he obtains from the animals under his care are really tests of himself and not of his animals. There is a saying that the dairyman and not the cows may be judged by the records of production found in his herd.

Keeping Records

Records are necessary if progress is to be made in the project. Only by studying what has been done and the accomplishments from it, can one make changes to improve his condition.

The Dairy Herd Improvement Associations are devices used by dairymen to furnish them such records as the Future Farmer must keep himself. In Iowa a dairy farmer joined a Dairy Herd Improvement Association to test his cows, so he thought. In the first year his cows averaged 338 pounds of butterfat. He was somewhat discouraged. His records were studied and changes indicated which the dairyman should make in his feeding and management, practices. These changes

were made and the second year his herd averaged 377 pounds of butterfat. Two of his cows had increased yields of almost 100 pounds more than during the first year. Again, after studying the second year's records, additional changes in the feeding and management of the herd were suggested and put into practice. With the same cows used in the first two years, the third year's average production was 451 pounds of butterfat per cow. To this farmer's surprise one of his cows produced 652 pounds of fat that year, almost double what she had done the first year. He realized that he had exceptional cows in his possession and that his entire herd was capable of producing well above the average herd and of being very profitable to him. This dairyman also learned that instead of testing his cows as he thought he would do when he entered the Dairy Herd Improvement Association he was testing mself and his methods of feeding and caring for his cows. He was wise enough to improve his methods of feeding and

Thruout this land and even the world, many skilled and well-trained men are conducting fundamental research with

dairy cattle and in dairy problems. Their results are published widely in dairy journals and many farm papers. The successful Future Farmer as well as the successful dairyman must always be on the alert to get this information. Unless one knows about new and better feeding practices or ways of improving his management of cattle, he has no judgment whatsoever about his wrong methods. Only by knowing the truth, can the truth make you free.

Getting the Facts

The study of the findings of research and good judgment in utilizing what is read will help the Future Farmer to put first things first in his dairy enterprise. He will learn that the kind of a barn in which his animals are kept is not nearly so important as regularity in feeding. He will know that properly balanced and adequately fed rations are worth more than the brushing and trimming of his animals. He will discover what are frills and what are essentials. He will strive for the essentials first and the frills later if time permits.

Above all the successful Future Farmer must love his work with dairy animals. If he does, he will be quick to learn because he will read with considerable retention of facts which will improve his knowledge and judgment, and he will enjoy making special effort in caring for his animals. We love to serve that which we love.

Supervised Practice That Develops Farmers

R. J. BISHOP, Teacher, Powell, Wyoming

POWELL is located in the northwest corner of Wyoming and is one of the outstanding irrigated farming areas of the state. The school system is made up of a consolidation of the entire flat, covering approximately 286 square miles. Seventeen busses carry 90 percent of the 1,200 students into Powell.

The community is strictly irrigated, receiving water from the Shoshone River irrigation project. Beans, peas, radish seed, alfalfa seed, sugar beets, and small grains are the chief crops; and sheep, beef, and hog feeding projects are the chief livestock enterprises.

The Agriculture Department of the school has an enrollment of 65 boys to whom the program is adjusted in order to establish these rural youth on an improved farming program. At this time 80 percent of the boys who have gone thru this training own a farm or otherwise have established themselves in the occupation of farming.

It may be interesting to see what is being done to improve the farming practices in the community as well as the program set up to teach boys to become farmers.

Supervised Practice Program

All boys are carrying supervised projects on the home farm. The boys are urged to establish a long-time program in the freshman year to build gradually into complete ownership of a farm. Community state, and federal outlook man

terials are used in order to adapt the individual's program to the home farm. Farm surveys are used by each boy, and the estimations of farm budgets are aids in making these programs workable.

The following figures will show the extent of last year's supervised projects program. Sixty-four boys carried 140 projects last year, netting total receipts of \$42,833.49. Total expenses were \$23,969.76, giving a total net profit of \$18,863.73. This allowed a project income of \$20,297.65. These figures were the highest in the history of the Department, and preliminary reports for 1941–42 indicate an even greater project report. State Department reports substantiate these results in annual and biennial reports.

It is our plan to visit each boy monthly on regular project tours. With these home visitations we do supplementary jobs with the boys on their farms, as dehorning, vaccinating, and castrating of livestock, seed treating, irrigation practices and insect and disease control. This supervision is essential in stimulating boys and their parents in the work and acquainting ourselves with home conditions. Parent meetings are held regularly to build co-operation between parents and the instructors as well as to give the parents of the boys an idea of what is being done to help the boy.

Co-operative Activities

Co-operative buying of livestock and

Dr. A. W. Nolan Retires

WORD has just been received that Dr. Aretas W. Nolan will retire from Teacher Education, University of Illinois, on September 1. Dr. Nolan pioneered in agricultural education. He has been a factor in the formation of the policies and programs in agricul-



A. W. Nolan

tural education in Illinois and thruout the country since 1917. The teachers of agriculture and members of the staff of the University of Illinois honored Dr. Nolan at a banquet attended by more than 300 persons recently.

Dr. Nolan served as both State Supervisor of Agricultural Education and as Teacher-Trainer of Illinois during 1917 and 1918. He has seen the growth of Illinois departments of vocational agriculture from none to 415. Many of the men he has trained are teaching in other

Dr. Nolan was the founder and has been the only president of Alpha Tau Alpha, professional agricultural education fraternity with chapters in 18 teacher-training institutions.

Dr. Nolan was presented with a combination radio-phonograph with records and a volume of 300 letters of appreciation written by professional associates. The program of the evening was transcribed and the records of it were presented to him. An enlarged photograph of Dr. Nolan was presented to the Department of Agricultural Education.

Dr. Nolan will continue to make his home in Urbana and plans an unusually active career as an emeritus professor. His advice will continue to be sought by workers in agricultural education thruout the country. He has kindly consented to provide the Editor of Agricultural Education Magazine with some of his Screenings, to be used each month. The first of the Nolan Screenings is appearing in this issue.

Supervised Practice That Develops Farmers

(Continued from page 57)

in getting lower prices for these goods and consequent higher profits. The chapter bought 100 head of cattle co-operatively. A purebred Poland China boar was purchased from the University of Wyoming and is used to build up the standard of our swine projects. The chapter co-operated in a lamb feeding experiment with the Great Western Sugar Company, and various other organizations in the community help to keep the boys interested in farming.

The chapter buys and sells garden seeds and plants in order to get higher quality crops in the community. The group participates in seed treatment of cereal grains, sugar beets, and other crops, and in the control of diseases and insects that affect

both crops and livestock. You may ask how these projects are financed. Thru co-operation of the local

have borrowed more than \$3,000 this past year for the operation of these projects. The boys, with the signatures of their fathers, stand good for these loans, and we have as yet not been disappointed in results obtained.

Our organization has the full co-operation of the local commercial club, business concerns, farm organizations, and the entire school system. This co-operation is essential for the full operation of this program and helps to inspire boys to do better work.

Adult Classes

As these boys finish high school, they are welcomed into part-time classes and evening-school classes where they study problems which they have on their own farms. Classes planned this year included poultry improvement, home gardening, farm-machinery maintenance and repair, and instruction in electric and acetylene welding. This program helps the boys to work together, furthers their agriculture training, and builds for closer co-opera-

Nolan Screenings

A Catholic priest speaking at an F.F.A. banquet said the coming of our teacher of agriculture into this community was a God-send. "He has thrown his life into sympathetic service for the farm people, he has gone about doing good night and day, and he has led the future farmers into happy and successful work." Thousands of communities are needing such teachers of agriculture, and a few hundred schools have found them. No higher reward comes to a true teacher than the appreciative plaudits of his pupils and patrons. Only a true teacher appreciates these rewards and is inspired to more whole-hearted endeavor because of them. Teaching vocational agriculture in any good American rural community is a strong man's job. No weakling can succeed. It is gratifying to us in the teacher-training department, as well as to those fortunate schools to which these good teachers go, that there are so many teachers of agriculture to whom the priest's tribute may apply.

Agricultural Education at the Crossroads

(Continued from page 45)

I am convinced that its importance as a forerunner and as a demonstrator of educational opportunities for rural youth transcends in importance anything else ascribed to it. Perplexing as its problems are, irritating as some of the administrative devices may be, it still must be conceded to be one of the greatest educational challenges and opportunities ever presented to agricultural educationists. If they fail to sense the significance and importance of the OSY program in the educational pattern being evolved, they do so at a tremendous professional risk to themselves and to the agricultural educa- among the boys. Its influence on livetion interests that lie closest to their

If for these youth there is to be a better way of living, it must come largely because they have the skills and abilities necessary to create an improved standard of living, rather than to purchase those things that make for a higher standard. If these young people, becoming adults tomorrow and heading up families of other growing young people, are to have any more than the bare essentials necessary for good health, clean living, wholesome recreation, and high moral standards, they are going to do so largely to the extent that with their own hands they are able to create the conditions and instruments whereby these things develop. Public education certainly can do no less than to help hold up the hands of this group as they strive for a better way of living. Agricultural education, you have your challenge; make of it what you will!

*Address delivered before the Agricultural Education Section of the annual meeting of the American Voca-tional Association in Boston, Massachusetts, Decem-

Purebred Sheep Project

LEWIS JONES, Teacher Creston, lowa

HE idea of a sheep project for the local F.F.A. chapter grew out of a discussion of the County Sheep Improvement Project and the purebred ram sale. The chapter decided that the project was sound, that it was needed, and that it fit into the community program.

The group elected a committee of boys who were interested in sheep improvement to assume the duties connected with the project. The committee investigated ewes for sale and possibilities for financing. The local bank offered to finance the project at a reasonable rate of interest. Desirable yearling ewes were located. The chapter approved these recommendations and the purchase was made of 10 purebred Shropshire ewes.

The ewes were divided into two lots of five each. Boys desiring to take one lot for a year made application to the committee who in turn investigated the boys' experience, equipment, and intentions. The names of acceptable candidates were put into a hat and drawn.

Used Business Methods

A contract was drawn up and signed by the sheep committee and the boys selected for the two lots. The contract provided that specific approved practices be used. The boys furnished feed, shelter, and labor and received in return all of the wool clip and half of the lambs. (As nearly as possible they were to have all ewe lambs with the bucks going to the chapter.) Veterinarian expenses and prize winnings were to be divided equally among the members of the chapter.

The ewes have gone to four farms. Three of the four boys have four or more purebred ewe lambs. Three of the fathers who never had a purebred ram before now have one. The boys have won some 15 premiums on their ewes and lambs at the county fair. The project has been economically sound and has developed considerable leadership and co-operation stock improvement in the community

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