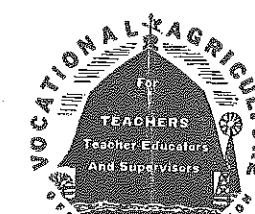


*In judgment situations, to suggest  
a different answer is relatively easy,  
but to suggest a better answer is  
often extremely difficult*



# The Agricultural Education Magazine

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## CONTENTS

They Are Coming Home.....	L. B. Pollom.....	83
The Future in Adult Education in Agriculture.....	H. M. Hamlin.....	84
A Plan for Evaluating Student Effort in Vocational Agriculture.....	C. E. Rhoad.....	86
We Are Not Teaching Vocational Agriculture.....	L. R. Larson.....	87
Farming Programs in Vocational Agriculture.....	Louis M. Sasman.....	88
An Entire Community Goes to School.....	Wesley H. Farrell.....	90
Conditioning Students for a Farming Career.....	Hugh D. Jones.....	91
General Methods of Reaching Objectives in Farm Mechanics.....	M. K. Luther.....	92
Terminology Again.....		93
Establishment of Former Students of Vocational Agriculture in Northeastern Illinois as Laborers and Partners on the Home Farms.....	Marvin J. Nicol.....	94
Paso Robles F.F.A. Finds Opportunities.....	Clive O. Remund.....	96
Lazy Teachers.....	K. L. Russell.....	97
Co-operative Program in Homemaking and Agriculture.....	G. S. Dowell.....	98
Banquet Banter.....		98

# Editorial Comment

## They Are Coming Home



L. B. Pollom

SCATTERED here and there over Kansas are young men who, because of wounds in battle or physical disability due to other causes, have returned from military to civilian life. Some have been in service three years or more, others for shorter periods. Their life plans and progress were interrupted when they joined the armed forces. Some of them were definitely established in farming or were working at the job with which they were happy and contented. Many of these, if their physical condition permits, will no doubt be happy to take up where they left off. Others, especially the younger ones, were taken more or less directly from high school before becoming established in any gainful endeavor. Still others were just gaining a foothold and could be said to be partially established.

What has gone on in the minds of these young men while they were in military service, only the boys themselves know. Some who had made a choice of a vocation before entering the armed forces may have changed their minds. Some who had decided not to be farmers may have changed their minds, and vice versa. Some may be undecided. We know they were thrown into a situation, the philosophy of which was just the reverse of their education, training and experience up to that time. Of necessity, they were taught to kill and destroy. Mankind apparently has devised no better means of preserving its rightful heritage than to kill and destroy.

IT IS inconceivable that some, perhaps a great many of these young men, have not had their thinking, their philosophy, their point of view, and their ideals considerably shaken. Their state of mind may not be readily discernible, but those of us who work with and for these young men in their rehabilitation and re-establishment will do well to bear in mind the possible and probable mental disturbances they have experienced, yet in our relationships with them our apprehension must not be revealed to them.

Some may have had experiences that will make it extremely difficult for them to re-establish a wholesome, desirable point of view. Some may find it difficult to readjust themselves, to think things thru, to make plans, to reach important decisions in matters that will have a profound effect upon their future.

Whatever the circumstances or state of mind of these boys, there is a job to do. No institution is better situated to assume a sizable portion of its responsibility than the public school. No department in the public schools is in a better position to serve returned farm youth than the department of vocational agriculture. These boys are returning to our communities today. Their numbers will continue to increase. What shall we do about it? Of course, we could sit by as passive observers. These boys would still find their way back to civilian establishment, but there would be no satisfaction in ignoring such a fine opportunity to be of service to those so richly deserving.

Recent Federal legislation seems to have provided generously for financing the education, training and re-establishment of returning service men. The Veterans' Administration has been made responsible for the administration of the program for disabled veterans. At this moment the administration of the affairs of those not disabled has not been fully determined, but these organizations deserve and have a right to expect the help and co-operation of every individual, every organization, every institution in a position to make a contribution. The job will compare in magnitude and importance with that of training and preparing these boys for war. The administrators of veterans' affairs must have the utmost help and co-operation if their efforts are to be most effective.

As teachers of vocational agriculture we can not ignore this responsibility. It seems reasonable to say that with a program carefully thought thru, a teacher of vocational agriculture can

civilian life than any other individual. Some will desire to become established in farming; some will not. Whatever their desires, as long as they remain on the farms of the community, they can make progress and the teachers of vocational agriculture can help them in doing it. This can be accomplished thru a young farmer program.

We perhaps may as well reconcile ourselves to the fact that no formula can be stated that will define or even partially define the exact procedure to follow. The procedure herein outlined is only suggestive. One might be successful in following a plan bearing no resemblance to it. The important thing is to have a plan. Where the teacher of agriculture has had a long tenure in the community and knew these boys before they joined the armed forces and perhaps had many of them in his day school and part-time school, an out-of-school program should not be difficult to stimulate. Those enrolled in part-time work before entering the armed forces will probably take up where they left off so far as their relationship to the teacher of vocational agriculture is concerned.

IN MANY cases a change has been made in teachers of agriculture since the boys left. As a result, the teacher will be a stranger to such young men. This should not deter him. His responsibility to them is no less because of such circumstances. Obviously, the approach to such a program will differ from that of the teacher who is already well acquainted with these boys.

It would seem that the first step to be taken would be to call on them at their respective homes soon after their return for a friendly visit, with no proposals of a part-time program being made. Don't hurry it. Cultivate the friendship of these boys thru such visits as much as time and gasoline will permit. Day-school boys can keep the teacher informed concerning returned men in their communities. If you are new in your community, a list of the boys now in the service should be secured from the Selective Service Board or the local newspaper. Perhaps a friendly call on parents of these boys before the boy's return would be appropriate.

After the teacher feels fairly well acquainted, he might invite the entire group to meet for a social evening with him in the agriculture class room. They probably would enjoy exchanging experiences since they were together as high school boys. Make them feel at home and let them know you have a genuine interest in them and appreciate their friendship. Don't be patronizing.

The shop might be open for them to explore. In some instances they may be impressed by the fact that the shop equipment has been improved since they left school. Welding equipment or a lathe or auto-mechanics equipment may have been added. The teacher might casually remind them they are welcome to make use of the shop evenings or when the shop is not in use. Perhaps some light refreshments might be served.

AS THE teacher associates with them, he should try to discover their interests, try tactfully to determine what they have in mind for the future, and decide what approach will interest them most. It is quite possible that the shop will carry the greatest appeal. If so, he should invite them to use it when it is not in use by day-school classes. Should several become interested in using the shop, plan for a regular time to have it open for them. Once they become accustomed to fairly regular use of the shop, the first step has been taken toward other activities. The way is a bit more clear to discuss with them their plans for the future. From this, it should not be difficult to have regular discussions of farming problems. It is assumed the teacher will discuss such plans with the superintendent or principal and the school board, and act only on their approval.

When the teacher considers the time ripe, he might suggest the organization of the group with officers. Through an organization, many accomplishments are possible that would be difficult without, such as co-operative loans, co-operative purchase of breeding stock, feeder stock, and feed, co-operative marketing, co-operative use of good sires, so on. Occasional social and recreational activities can be sponsored thru such an organization.

The recently passed Federal Act known as the "GI Bill of

S. S. SUTHERLAND

# Professional

HENRY S. BRUNNER

## The Future in Adult Education in Agriculture

H. M. HAMLIN, Professor of Agricultural Education, University of Illinois

THE war has forced us a generation ahead in adult education in agriculture. The things we were doing in 1940 look puny and childish to us now. They reveal us then as people of little faith and few works.

The events impending at the close of the war may force another great advance within a few years.

What may we expect? What opportunities will there be which should be grasped? What dangers await us?

One who attempts in a time of revolutionary change to predict the future is reckless indeed. It is possible, however, to chart some long-time trends which will probably continue and to list some developments which we may fervently hope will occur, whether or not they actually will occur. In this spirit, I am making the following predictions.

1. *The schools will have an increasing part in adult education in agriculture.* We have proved to ourselves, the greatest doubters of all, that farmers by the hundreds of thousands will patronize our classes. We have reached in great numbers persons who have never before been reached with systematic agricultural education. We can continue to reach them.

2. *We shall retain after the war the gains we have made during the war.* These gains seem to me to be the following:

- The offering of many classes in many subjects in each community each year.
- The provision of classes when and where the class members want them, particularly the use of neighborhood as well as community centers as meeting places.
- The use of special teachers to supplement the regular teachers.
- The provision of "doing," rather than "talking" courses. (Food preservation and machinery-repair courses, both "doing" courses, have topped the list in popular appeal.
- The organization of students in small classes. This will be necessary if neighborhood "doing" courses are to be provided.
- The distribution of courses thru a large part of the year.

3. *We shall find a middle ground in the "education vs. service" controversy.* One suggestion has been that we compromise on "educational service." Many schools are



H. M. Hamlin

cow testing, and sow testing. They will not, however, be carried on indefinitely for the same people. They will be used to teach certain lessons and when these lessons have been taught, the students will be expected to carry on by themselves individually or in co-operative groups. In many other cases, groups will organize their own activities but will look to the school for the education they need to conduct them, as in Nova Scotia where farmers who wish to join a co-operative association must first complete a course related to the work of the association. There are no indications that the school is going to go totalitarian and provide for the community all of the services which individuals cannot by themselves provide.

4. *We shall widen the scope of our adult courses.* During the war we have largely restricted our offerings to courses required by the emergency. At the end of the war, there will be pent-up interest in many other subjects. Some of them are likely to be farm buildings, farm and home conveniences, farm records, industrial uses of farm products. We can hope that farmers will want education for the making of public agricultural policies, for co-operation in agriculture, for farm health and sanitation.

5. *Our immediate postwar emphasis will shift from work with older farmers to work with young farmers.* There will be war veterans and returning war workers with desires for continuing their education in agriculture or for re-education for agricultural occupations. There will be federal and state funds to assist in doing the job. Some of us have thought for a long time that the young-farmer group is the one which would reward our greatest attention. Perhaps in the next few years we can shake ourselves out of the inertia which has attended our efforts in young-farmer education for the past generation. After the last war, we attempted to provide agricultural education for veterans thru the colleges. We were not very successful. This time there are too many veterans eligible for agricultural education to care for all in a few institutions. More important, we shall not this time ask so many veterans to choose between continued education and a job and a family. This means that veteran education will have to be conducted in the communities in which the veterans have jobs and families.

6. *We shall build many new schools with the needs of adults in mind as we build.* School building has been eliminated for several years. There will be a wave of school building construction after the war. Surely we are not so traditional in our thinking as to build more schools for

buildings intended for adults as well as children would give adult education a major impetus. Special rooms for adult classes can often be provided. The school library in most small communities can be made the community library. School buildings can be made freely available for adult use during a large part of the day, week, and year when they are not in use by children.

### More and Better Teachers

7. *We shall develop staffs of special teachers.* Some of the laymen we have been using as teachers during the war are highly competent and have found satisfaction in teaching. They should continue to be available to assist the regular teachers. This does not imply that mechanics and farmers with eighth grade education are "as good as" the regular teachers, or that the requirements for our regular teachers should be reduced. We cannot compare the work of special and regular teachers. Entirely different qualifications are necessary. Because he is directing a broader, more complicated program and because a large part of his clientele is now adult, the regular teacher needs to be a more competent and more broadly trained man than ever before. We can, however, give up the idea, if we ever had it, of training the regular teacher to be a specialist in everything agricultural. He can leave many specialties largely to his special teachers, dealing with them only as a supervisor and administrator.

8. *Additional regular teachers will be employed in many communities.* But for the manpower shortage, additional teachers would already have been employed in many more communities to assist the regular teachers in carrying the tremendously heavier burdens which increases in adult enrollments have brought.

9. *We shall be able to attract and hold better teachers as more of our teachers develop adequate adult programs.* One of the best testing grounds for teachers is in adult classes. Certain kinds of teachers will be eliminated because they cannot teach adults, and adults will demand the retention of many teachers who would otherwise be lost.

10. *We shall adjust the schedules of our teachers to make allowances for adult work.* We cannot expect our teachers to work night and day. The day-time teaching load will have to be lightened if we are to maintain even our present adult program. Summer schedules will again have to be planned so that teachers may have adequate vacations and time for professional improvement. In brief, we must plan schedules which normal people can follow year after year without impairment of health, without interference with normal family and social life, and without eliminating their personal leisure and recreation.

11. *A new concept of supervised practice for adults will evolve.* In our courses in farm-machinery repair and in canning, adult farm people have become accustomed to working under the observation of a

the observation and supervision of the teacher to the home farm activities of these adults. Perhaps the time will come when an adult farmer entering an evening class will understand in advance that, if he is to be helped in acquiring farming abilities, it will be necessary for the teacher to observe and evaluate his farming and to have available any data about his farming necessary to help him improve it.

### Adult Education Emphasized

12. *Adult education in agriculture will become a year-round activity.* Not only shall we hold different kinds of classes at different seasons but we shall consider in many courses that the enrollment is for a calendar year with seasonal meetings and supervised practice following the regular series.

13. *Many courses will be conducted over a two- or three-year period.* We have had isolated examples of farmers who have studied the same subject for ten or more years. We shall probably have many classes in the future like those in milk production which are now being conducted in some communities. As a result of the first series of milk production classes, arrangements are made for weighing and testing milk from the students' herds and the resulting records are studied. Such a class begins to do its best work in the second year and it may continue to be profitable for three or more years.

14. *We shall gradually get away from our older ways of evaluating adult classes.* We have still talked during the war mainly about the number of classes conducted and the attendance at these classes. Of course, these are important items in evaluation for, over a period of years, they are an index of the valuation placed upon the courses by the people attending. We shall, however, have better indications of our results as we begin to use indices of farming efficiency and to get records which indicate the progress in farming of those who come under our tutelage. As our objectives in adult work get clearer, our evaluation of outcomes can become sounder. We shall recognize more fully some of the by-products of adult education which are often more important than the products we have principally sought, such as growth on the part of our farmer-students in co-operative-ness, in public spirit, in interest in farming, in their homes and families, and in their communities.

15. *We shall quit establishing departments which serve only high-school boys.* We shall also decline to re-establish departments, dropped during the war, which have ignored the major portion of their clientele, the adults. If we had no better reason, we would do this in order to get a better program for the high-school pupils. We shall probably have many departments established primarily to serve adults.

### Advisory Councils Important

16. *Advisory councils will be used almost universally.* While many other things have changed during the war, the value of the advisory council in adult work has remained almost unchallenged. Three types of councils will be widely used: (1) general councils, advisory regarding all of the work of a department, (2) neighborhood councils to sponsor adult classes in a farming neighborhood, and (3) special councils for special subjects taught to classes

17. *The instruction in our adult classes can become more advanced.* Our experience has been that the more education a person has the more he is likely to want. As we do a better job of agricultural education with children and youth, we shall not diminish the need for classes for older adults, but we shall be able to teach in them much that is too advanced for our present clientele. We shall teach more of the "why" along with the "how" of things. We can have beginning, intermediate, and advanced classes in many new subjects. We can develop schools for adult farm leaders in which agricultural issues and plans for the future development of the community's agriculture can be considered in the broadest possible perspective.

### Part-Time Farmers Recognized

18. *Part-time farmers will become an important part of our clientele.* The long-time trend toward the decentralization of business and industry is almost certain to continue. More businesses and industries will develop in small communities. These will attract farmers for a part of their time and will make possible country homes and small farms for many who have formerly lived in cities. Instruction for this group will have to be specialized. Many who will want instruction will have little background for it. A new kind of farm management instruction, concerned with the management of small acreages, will have to be worked out.

19. *We shall develop new kinds of instruction to aid the production and use of new industrial products from agriculture.* One leader in chemical engineering has predicted that we are to have an eight-billion-dollar alcohol industry using farm products. More use of farm products in making plastics can be forecast. New crops and new animal industries may come into being. Teachers of agriculture will have a great opportunity to help adult farmers to adjust to these changes.

20. *We shall use our adult classes even more than we have to acquaint farmers with the services available from other agencies.* Probably one of the greatest services our adult classes have rendered has been in letting farmers know what is available to them from such agencies as the agricultural colleges and experiment stations, the Soil Conservation Service, the Farm Credit Administration, and from many other public and private agencies. If this service is well performed, it alone justifies our efforts. We shall go further in making farmers able to use the facilities which have been provided for them, often at great expense.

21. *We shall recognize that many of our farmers can be much more efficient.* There has been a good deal of pussy-footing at this point. Yet the facts are that before the war 50 percent of our farmers produced 90 percent of our commercial farm products and that, after we had lost almost half of our farm workers to the armed forces and the war industries, our farm production in 1943 was 30 percent above the average of the years from 1935 to 1939. How much further we can go in increasing efficiency of production remains to be seen.

22. *We shall have to provide the best guidance we can for older youth and adults.* I have already indicated that, before the war, we had a surplus of rural adults. Our best estimates indicate that about one million of the four million farm workers

for the armed forces and for urban industries could well be reabsorbed in farming. The other three million would apparently help themselves and society, including rural society, if they could be profitably employed elsewhere. Following the war, we can expect an occupational and geographical shifting of adults unparalleled in history. The movement should be guided as best it may; it should not just "happen."

23. *Training for adult education will become an integral part of teacher-training.* This means that we shall not merely add courses about young farmer and adult farmer education, but that our entire teacher-training program will be reoriented. Some of the things teachers need most to learn about teaching children can best be approached from the study of adult education; for example, that real learning is always voluntary, that classwork and farm practice must be linked together, that you cannot do much for children without adult assistance. A community-wide approach to agricultural education is now possible rather than an approach through the education of a few farm boys in high school. First-hand experiences with adults and a knowledge of adult psychology are as important in teacher-training as practice teaching in high-school classes and the study of adolescent psychology.

These "predictions" imply that we have really only begun to provide adult education in agriculture, that we have ventured in part by accident into a vast new realm which we shall be a long time exploring. The important consideration now is that we recognize that the end of the war will find us at the threshold of a new era in adult education and not merely at the exit to a rather fantastic period called "the duration."

## Celebrate 40 Years

THE Waterford, Pennsylvania, community has staged a celebration marking the completion of 40 years of agricultural instruction in its high school. The event, the annual father and son banquet, of the Waterford F.F.A. Chapter, brought together some 150 persons. The guest of honor for the occasion was Waterford's first teacher of agriculture, Mr. H. O. Sampson, now supervisor of agricultural education in New Jersey. Nine members of the first class to study agriculture also joined in the celebration. Other leaders who have had contact with the department include Dr. L. H. Dennis, then of the State Department of Public Instruction, now National Secretary of the American Vocational Association, Professor R. H. Heim, since 1919 State Director of Vocational Education in Delaware, and Raymond J. Salmon, now finishing his eighth year as teacher of agriculture at Waterford.

The program was planned to link Waterford's leadership in agricultural education at the turn of the century with her present-day achievements. Accomplishments of the department, the F.F.A. Chapter, and the school as a whole were appropriately reviewed in highly laudatory style. Many individuals personally contributing to the educational leadership of this department or benefiting from it added their messages of congratulation.

Celebrations equally appreciative and unique in content may be expected in

# Methods of Teaching

G. P. DEYO

## A Plan for Evaluating Student Effort in Vocational Agriculture

C. E. RHOAD, Professor of Agricultural Education, Ohio State University

ARE you as a teacher of vocational agriculture satisfied when a boy demonstrates in class that he knows *HOW* to treat seed oats for smut but leaves his seed oats at home untreated? If you give him a mark equal to the boy who not only demonstrates that he has been taught *HOW TO DO* but that he has been taught *TO DO* by treating his seed oats at home, then you break faith with our basic philosophy of "learning by doing."



C. E. Rhoad

Are you giving grades and yearly credit based only on class work? If you are, then you are encouraging the boy who is "sharp" at classroom work to continue this tendency and to neglect his farming program. Also you tend to make the sincere, hard-working, practical-minded boy who is a real "doer" feel that he doesn't amount to much when you and I as teachers know that the opposite is true.

Are you giving boys their full credit the day school closes? If you are, then you are like my father who gave a hired man his month's wages on the 29th of June. The fellow didn't show up for work on the 30th and boasted about how he "got paid for" a day's work he didn't do.

Do you "hand down" the grades each month from your lofty throne without making sure that every boy knows just why he received his certain mark? If you do, then you are not using the marking system as a teaching device. It is not even an effectively used "club" because the poor student doesn't know why he has been "whacked" and, therefore, doesn't know which way to turn to avoid more clubbing next time. Furthermore, you are not training him to be a good judge of the efficiency of his own efforts which should be an essential part of his education.

I contend that a good program of evaluation of student work should do the following things:

1. Measure student behavior in terms of progress toward specific goals accepted by him and considered by the teacher to be desirable
2. Measure student behavior in relation to real life situations rather than artificial ones
3. Teach students to evaluate their own efforts fairly
4. Develop in students favorable attitudes toward honest evaluations of their efforts

future. Serve as a teaching device  
6. Provide for individual differences of opportunity and capacity, and measure the student against his goals rather than against other students

7. Measure attitudes as well as command of information. Determine what students have been taught *TO DO*  
8. Emphasize the various phases of student behavior in direct proportion to their importance in our objectives

In order to carry out the points just listed, I propose the following program which has these main features:

1. Grades based on efforts in farming program as well as on class work
2. Credit given only after it is earned
3. Grades made out co-operatively by student and teacher

The details of this plan are easily managed. Students in the class are asked to set up a fair system of grading. The resulting plan can easily be guided by the teacher into a program similar to this one which was first set up by my students in 1937.

A. A self-grading sheet to be filled out in duplicate by each student at the close of each grading period as the result of a conference with the teacher involving a discussion of the entire program of the

student. After the grades have been agreed upon the student keeps one copy and the teacher the other. Students use these sheets as guides in improving their work during the next grading period.

A study of the grades over a two-year period as estimated by the student compared with the final approved grade showed that more grades were raised than were lowered and that students were sincere and honest in their appraisals.

### Students Grade Their Shop Projects

This same self-grading principle was used in the farm shop. When a student finished a project the student and either a committee or each member of the class placed a grade on the work. After discussing the project a grade was then agreed upon. Student judgments improved definitely during the school year.

B. A systematic evaluation of the summer work of the students.

This involves at least three definite evaluations of the student's farming program as well as an evaluation of the student's work of completing his projects and closing his records. These four grades are averaged and considered as a "third" semester.

C. Giving credit after the work is done. Students are given their regular semester grades, but the course grade is not given until the projects are completed and all records summarized to the satisfaction of the teacher.

(Continued on page 87)

### SELF EVALUATION—VOCATIONAL AGRICULTURE

Student Name *James Miller*

6 Weeks <i>4th</i>	Farming Program
Semester <i>2nd</i>	2 Sows and litters
Date <i>March 6</i>	10 A corn
	2 Dairy heifers
	Farm accounts

	My Estimates	Final Grade
I. Farming Program including records (Possible 80%)	70	72

Accomplishments:	Things Not Done that I Could and Should Have Done:	My Estimates	Final Grade
1. Cared for sows at farrowing	1. Failed to clip needle teeth	11	10
2. Ordered seed corn	2. Failed to put sod in pen		
3. Kept records up-to-date	3. Farm accounts not complete		
4. Fed approved rations	4.		
5.	5.		

II. Classroom Work (Possible 15%)	4	4
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III. F.F.A. Activities (Possible 5%)	85	86
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### Solving the Problem

How are we going to "do something for these guys"? Say, brother, all you have to do is to recognize a few basic principles and you're on the way:

1. Let these young men out of high school know that you are willing to help them to the full extent of your ability.
2. Make yourself available, but don't force yourself upon them. Don't do a lot of promoting. Let them make some mistakes. You "can't change their three cornered pants" all of their lives anyway.
3. Encourage a feeling of mutual cooperation among your group. Create a feeling, on their part, of responsibility to society and to the great field of agricultural life.
4. Remember that you can't teach anyone (we teach ourselves in the final analysis) and that you as the agriculture instructor are only one of the many agencies that influence your students.

Not too tough a program, is it?—Like it? Try it! Vocational agriculture has a wide open road ahead of it, pioneering in a field of education which to date has only been "slightly scratched." It seems to me that administrators of the national vocational agricultural program should grasp this opportunity, not only by both horns but by the middle as well. To do so will create a sounder vocational education program; result in a sounder development of agricultural leadership and followership, and incidentally make for a longer tenure of service on the part of agricultural teachers. This increased tenure will, in turn, reflect on the first two points in an ever-increasing "non-vicious cycle."

The real focal point for the vocational agriculture program should be centered on the young man who is really interested in the farm and roughly can be "fenced in" by the ages of 18 to 35.

Over 25 years have elapsed since the passage of the Smith-Hughes Act. At that time a hybrid was fashioned by marrying the 4-H project idea to the high-school curriculum. This still constitutes the most common type of educational matrimony in our field of so-called vocational agriculture today. Now it wasn't a bad start—the union was correct both legally and morally, but after 25 years of experience, we should mature and recognize the place and techniques necessary for carrying on a real vocational agriculture program.

So what? Well, aren't the following statements true?

1. The average Ag. boy in high school is so busy "doing things" that he hasn't time to think.
2. This same boy hasn't aged enough to be vocationally minded.
3. The need for vocational thinking hasn't been felt by the average high-school boy.

Then who constitutes the vocational group? Gentlemen, I submit to you that this group is made up of the men who have completed high school and who have not become completely "heeled in" as well established farmers.

What have we done for this group? Comparatively little, yet a major share of our time should be given over to them. Well, why not? Seems to me that not only will we be doing some real vocational service, but we will find less movement out of the field of vocational agricultural teaching when our teachers find that they are

The revised words for "Hail the F.F.A." copyrighted in 1929 were written by...

## We're Not Teaching Vocational Agriculture

L. R. LARSON, Teacher, Beaver Dam, Wisconsin

LET'S quit kidding ourselves! Vocational agriculture teachers are spending less than one-third of their time teaching vocational agriculture. They're teaching prevocational agriculture most of the time!

Let's have the courage to face the facts:

1. The average full time agriculture teacher works, say 55 to 60 hours per week for 49 weeks of the year. This totals to about 2,800 hours per year.

2. Of the above time, he spends 1,200 hours in the high-school classroom teaching prevocational agriculture.

3. He gives 500 hours to supervising prevocational farming programs of his students.

4. Something like 150 hours is given over to the prevocational Future Farmer program.

Total 'em up—1,850 of 2,800 hours are given over to teaching prevocational agriculture. Well isn't it true?

No, I didn't say that prevocational agriculture wasn't important. It's simply a means, not an end! How come? Well, brother, listen. I've taught this so-called vocational agriculture for 19 years in one of the soundest farming communities in the United States, (the last 17 years in Beaver Dam, Dodge County, Wisconsin). I would have had to be very dense not to see that if vocational agriculture departments don't start teaching vocational agriculture—and soon—someone else will!

### Value of All-Day Classes

To date, our prevocational agriculture program (high school Ag. classes) has been valuable in at least one respect. Perhaps it has helped to keep a little higher percentage of the best agricultural brains and ability on the farm than would have normally "stayed by." We recognize the fact that the farm is the incubator for the bulk of our surplus population. So it is, and we must expect this surplus to drain to the urban centers; but let's continue to do all in our power to encourage our promising boys—those with the best brains, the greater mechanical ability, the most co-operative spirit, and the other essentials to reach success, to stay with the farm. Have you been guilty of encouraging that "top notch" farm boy to go on to college and assume a position of "leadership"? Better consider that advice twice—yeh, maybe three times! The soundest farm relief is developed right back on the old homestead.

Now what about this vocational agriculture business? Is the farmer's-night-school idea the answer? Well, let's see.

1. Most of our agriculture instructors are relatively young men and have only short durations of service in any one community.

2. The best farmers can take care of themselves pretty well, (always have, you know), and the ones that need help don't go too strongly for "schoolin' in large doses."

Looks hopeless for that program, too, doesn't it? But not quite, tho. The agriculture teacher does not learn a lot about farming while holding these classes.

## An Editor's Delight

Mr. Larson's article was submitted for publication with the request that it be accepted as is or not at all. Since this is vacation season, the editor complies—printing it without changing a comma.

the importance of the art and business of farming that they, too, are struggling with.

### What Is the Vocational Group?

#### Larson Analyzes the Vocational Agriculture Program

The all-day program of vocational agriculture is in reality a prevocational program. Its value lies in inspiring our best farm boys to stay with the farm; to start studying its problems; and to learn of the many values of agriculture life.

The adult-farm-night-school program is fine training for the agricultural teacher; is fine for establishing adult interest in the local agricultural department's program; and may incidentally be of some vocational value to class members.

Over 25 years have elapsed since the passage of the Smith-Hughes Act. At that time a hybrid was fashioned by marrying the 4-H project idea to the high-school curriculum. This still constitutes the most common type of educational matrimony in our field of so-called vocational agriculture today. Now it wasn't a bad start—the union was correct both legally and morally, but after 25 years of experience, we should mature and recognize the place and techniques necessary for carrying on a real vocational agriculture program.

So what? Well, aren't the following statements true?

1. The average Ag. boy in high school is so busy "doing things" that he hasn't time to think.
2. This same boy hasn't aged enough to be vocationally minded.
3. The need for vocational thinking hasn't been felt by the average high-school boy.

Then who constitutes the vocational group? Gentlemen, I submit to you that this group is made up of the men who have completed high school and who have not become completely "heeled in" as well established farmers.

What have we done for this group? Comparatively little, yet a major share of our time should be given over to them. Well, why not? Seems to me that not only will we be doing some real vocational service, but we will find less movement out of the field of vocational agricultural teaching when our teachers find that they are

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## Evaluating Student Effort in Vocational Agriculture

(Continued from page 86)

Since we try to teach students TO DO the things good farmers do, we must evaluate their work after they have shown the degree to which they will carry out these good practices in life.

A summary of the grades of a student for a complete year follows:

1st 6 weeks	75
2nd 6 weeks	85
3rd 6 weeks	80
1st semester average	80
4th 6 weeks	80
5th 6 weeks	80
6th 6 weeks	83
2nd semester average	81
1st f.p. summer sup'vsn	80
2nd f.p. summer sup'vsn	84
3rd f.p. summer sup'vsn	83
f.p. completion	81
"3rd semester" average	82
Final grade	81

This proposed plan has been in use here in Ohio since 1937. It is being more widely used each year. If you will praise this plan in terms of the eight functions of an evaluative program outlined earlier in this article I think you will find, as many of our teachers and school administrators have found, that this plan is workable and worth while.

The revised words for "Hail the F.F.A." copyrighted in 1929 were written by...

# Farming Programs

C. L. ANGERER

## Farming Programs in Vocational Agriculture

LOUIS M. SASMAN, State Supervisor, Madison, Wisconsin

VOCATIONAL education under the provisions of the Smith-Hughes Law is designed for those who have entered upon or are preparing to enter upon the occupation of the farm. One of the requirements established by the law was that six months of supervised practice in farming must be included in the program of those enrolled.

When the Smith-Hughes Law was passed in 1917, the Smith-Lever Law was three years old and club work with its projects was becoming well established. It was quite natural, therefore, that the requirement of supervised practice in vocational agriculture should be interpreted to mean that "projects" should be carried on.

Today, however, the general conception of the program in vocational agriculture is that here is a program which is designed to provide the best possible training for those who are farming or preparing for farming.

To train for farming or any other occupation, there must be a combination of study and experience. Books and bulletins can provide ideas and the results of research, but no knowledge is really gained until it can be put into practice. A person could study how to milk a cow from now until doomsday, but if in milking he didn't know how to approach the cow or how to attach the milker, he might learn more in thirty seconds of actual practice than he would learn in hours of study from a book. The question then becomes: How best can we combine study and experience in preparation for farming?

It is desirable for every one to own something of his own. There is a pride in ownership and a sense of responsibility developed thru it which probably cannot be accomplished in any other way. Consequently in working with youth in vocational agriculture, it is highly desirable that there be included in the program the development of productive enterprises owned entirely or in part by the pupil. It is not necessary to stress this phase of the program at the present time because its importance has been so thoroughly recognized that, in many cases, the so-called "project" makes up the whole farming program of the pupil.

However, if vocational agriculture is to really provide systematic training for farming, there must be more experience



Louis M. Sasman

thing the youth of the nation are largely growing up on farms so that instead of one son in a family, there may be two, three, or four. Oftentimes, even though a farmer may be anxious to have his sons own as much as possible, he is faced with the practical problem that, if he allows one son to have ownership of a developing enterprise and another son ownership of another enterprise, he may find that his own chances of ownership are decidedly limited. Furthermore, unless the ownership is of such scope as to take in finally all the enterprises on the farm, it cannot really provide effective training for the business of farming. In addition to this fact, it must be recognized that the patriarchal system is still a very effective force in many families and that, in such families, the parents assume that until he reaches the age of twenty-one, the products of the labor of the son belong to the family and ownership is the prerogative of the parents.

### Improvement Projects

For this reason, in some states the improvement project has come to be recognized as an important part of the farming program. In fact, to be perfectly frank, in Wisconsin we have a number of departments of vocational agriculture in which the improvement project is the center around which the farming programs revolve.

The principal form of improvement project in Wisconsin is the keeping and the use of dairy herd records. Last year there were 9,777 farm boys enrolled in high-school departments of vocational agriculture in Wisconsin and 2,349 of these, or about one-fourth, reported having carried on a year-round program of dairy herd testing on nearly 39,000 cows. This program, of course, involves not only the matter of testing milk and keeping records, but the improvement of feeding, the culling of poor producers, the making of dam and daughter comparisons, and the selection of improved sires.

Another type of improvement project in Wisconsin is the planting of windbreaks. Last year 1,190 high-school pupils of vocational agriculture engaged in this enterprise, planting a total of 211,000 trees.

Other projects carried on included 1,116 in improved dairy feeding; 892 in orchard development, planting 13,000 trees; 872 in the use of commercial fertilizers; 836 introducing improved grain or corn; 777 carrying on home-ground improvement; 728 planting farm wood lots; 656 liming 10,000 acres of land; 641 improving farm buildings; 631 improving

farm records; and 379 introducing purebred sires. This is not, of course, a complete list of the improvement projects, but shows all of those that were reported by more than 350 pupils.

The improvement project is a valuable addition to the productive enterprise as a means of broadening the farming programs of boys enrolled in vocational agriculture, but even tho a boy had a good productive enterprise program and a good improvement project, he could not necessarily be said to have a well developed farming program.

There were over 24,000 approved practices carried on by Wisconsin high-school students of vocational agriculture in 1942-43, 4,335 testing the soil of the home farm, 3,241 pruning the home orchard, 2,548 treating seed grain, 2,441 culling the home poultry flock; 1,840 castrating pigs and lambs, 1,522 inoculating legumes, and 1,397 dehorning calves. Again this is only a partial list because instructors were asked to report only the practices of greatest frequency. These approved practices not only give the boy practice in developing many of the skills needed in farming, but also decidedly affect the practices on the farm. If a boy carries on a farming program of productive enterprises, improvement projects, and approved practices, he could have a well-rounded program.

### Farm Skills Important

However, there is one other phase of a farming program that needs emphasis on most farms. That is the development of farm skills. It is usually considered that, because a boy grows up on a farm, he will acquire the skills that a farmer needs to have. It has been our experience in Wisconsin that many boys grow to manhood without the opportunity to develop the skills which their fathers have and which it is necessary for them to have to farm successfully. To be sure, a boy is allowed to plow and to cultivate, but when it comes to planting corn or operating the drill, the father is apt to think that the boy can't do the job, so he does it himself. The same situation applies to many of the jobs requiring skill. Oftentimes, it seems that the son of a poor farmer is more apt to get experience in farm skills than the son of the good farmer because the poor farmer may go to town and let the boy acquire the skills by himself while the good farmer is so anxious to have things done right that the boy never gets a chance to try. For that reason we have placed considerable emphasis in our farming programs on the development of the ordinary skills. We have emphasized that, as a rule, the father is in the best position to teach such skills, altho there are some that the instructor in agriculture can teach best. Of course, right now, this situation is abnormal because most farm boys are being called upon to do the work of men and are being given the opportunity to acquire skills which a few

## Dairy Improvement Successfully Promoted

NEILL LEFORS, Teacher,  
Checotah, Oklahoma

AFTER making a careful study of local needs, the Checotah, Oklahoma, Chapter selected dairy improvement as a major activity in their program of work.

Their study revealed first, a large acreage was being turned back to pasture, thus increasing the grazing area; second, pastures already in use needed improvement; third, the necessary corn, grains and hay were already produced in abundance; fourth, no registered cows were owned in the community; and fifth, there was a good local demand for cream and there were facilities for shipping whole milk.

This community is located in a country where cotton is produced and consequently where cottonseed meal as a protein supplement is available at a reasonable price. Alfalfa hay is raised in the creek and river bottoms. The soil conservation program has stressed the importance of growing more and different kinds of legumes for feeding, as well as for soil improvement.

After the situation was analyzed and reviewed by the boys in the department, they began their plan for improvement in the community by selling their parents on the idea. First, the boys talked to them about the importance of good sires. Their argument was that the bull had a half-interest in all the offspring whereas the cow had only a half-interest in one offspring. Therefore, it would seem that it was very important to consider the bull in taking steps to secure a better grade of cows in the herds.

Interest was slow to kindle. However the boys were certain that they were on the right track and worked harder at their task to sell their idea. After two years, a farmer purchased a registered Jersey bull. This purchase inspired other farmers to give the idea further consideration. When the heifers from this sire were six months old arrangements were made for a small show which gave the farmers an opportunity to observe these heifers and study their characteristics and development. Interest began to pick up. The boys who were developing the dairy program decided to make a tour of some of the outstanding herds in northwestern Arkansas, about one-hundred miles distant. They extended invitations to their fathers and other interested farmers to make the tour with them. They visited show herds, as well as herds kept only for the purpose of producing milk for farm revenue. The tour further stimulated interest in the improvement project. To date our community has several Jersey sires that rate one or more stars because they have outstanding pedigrees and records behind them. There are also six other Jersey sires that are registered but not yet started. The boys themselves have purchased nineteen head of registered cows and heifers and farmers have added six more.

This is not the end of their story because the daughters of these sires are now in production and are showing the results of good breeding. This project and its results indicates the value of a community

The important thing in developing farming programs in vocational agriculture is to keep in mind that the object of the program is to give experience in farming. If we are really maintaining a program of vocational agriculture, we must maintain a program that combines study and experience and that covers the whole range of activities included in the training program.

### Parents Must Understand

In the development of a farming program or any other program affecting youth and parents, one of the essentials of success is a thorough understanding of it by all concerned. There is not much use in trying to get a boy interested in keeping and using dairy herd records until you know what his father thinks of such a program. We have boys who have had to stop testing because the program would have eliminated some cow which the boy's father liked. Under such conditions it would probably be better for that boy not to have started testing. If there is going to be a farming program developed that is of real significance to a boy, a family, or a farm, such a program must be thoroughly discussed before it is started. I don't suppose that a teacher could expect to start a boy with a purebred gilt, a beef calf, or a hatching of chicks without first consulting his parents. At least if he did, there would be certain to be some misunderstandings. If a program is to be started that vitally affects one of the most important enterprises on the farm, it is still more important that there be a clear and complete understanding of it.

In many of the Wisconsin departments a Junior Dairy Herd Improvement Association is organized with officers, paralleling a regular cow testing association. A manager may be elected or a committee selected to handle the routine of the program, such as determining testing days for each member, checking on conditions of the laboratory, reporting use of equipment, and collecting charges for breakage. At Oshkosh, each boy in the department is given a milk scale at the beginning of the year and, if he carries the program for a year, the scale becomes his. This is probably the most satisfactory program of dairy herd testing in the state.

The real proof of a dairy herd improvement program is its effectiveness in improving the dairy herds. We have had thousands of boys keep records of their annual herd production from year to year and note the progress being made. The first step is the elimination of low producers that cannot pay the cost of production. Another step is dam and daughter comparisons which aid in the selection of cows which should become brood cows for the herd, and in some herds make it possible to prove sires and determine their usefulness for increasing milk and butterfat selection. Naturally, herd records immediately affect the feeding of the herd because of the greater attention focused on the production of each individual.

The majority of Wisconsin departments are also equipped with a sediment tester and many of them with a Methylene Blue outfit for determining the cleanliness of the milk. While great progress has been made in the production of clean milk in the last ten or fifteen years, it seems quite probable that

order to produce the desired quality of dairy products. Departments of vocational agriculture can aid very materially in this program through improvement projects conducted in a practical manner. Soil improvement is another type of improvement project that is carried on in many of our departments and one which is fully as important as dairy herd improvement. In fact, the maintenance of dairy production depends upon the maintenance program of the productivity of the soil. It is not necessary now to go into detail on this program except to say that it is dependent upon careful sampling and testing of the soil, the study of soil and crop needs, the determination of amounts and kinds of fertilizers to use, the control of erosion, and the establishment of a long-time program of land use.

In this presentation today, I have talked about the farming program for the high-school boy enrolled in vocational agriculture. However, those who know me well, know that I believe that the high-school program in vocational agriculture is just a prelude to a real program of vocational training in agriculture. I do not mean to minimize the value of agricultural training in the high school. I think it has guided many farm boys into farming occupations who, if it were not for the work of the agricultural department, would either not have gone to high school at all or would have been guided by the high school away from farming occupations. In Wisconsin, however, not over half of the farm boys finish high school, and many of those who do complete it with the hope on the part of either themselves or their parents that they are going to find both more pleasant and more profitable employment-off the farm as a result of their high-school training. As a real program of vocational training for farming develops it will offer training for those who have entered upon, or have definitely decide to enter upon, the occupations of the farm.

The farming programs which I have discussed for high-school pupils are fully as applicable to pupils in young farmer classes. In fact, these young men are still more vitally interested in developing improvement enterprises, approved practices, and skills in farming. These young men are apt to be in some partnership arrangement and directly interested in everything that can be done to improve the productions of the soil or the herds or flocks. At the same time, they are in a position of somewhat greater authority than high-school boys and able to develop the type of programs in which they are interested.

Then when we come to classes of mature farmers, we know that, if they come to adult classes, they do so with the thought of getting ideas which they can apply at home. If they don't make that application, it will be because they have not felt that they received information that was applicable to their situation.

Training can be considered vocational only when it combines the features of study and experience. We are on the verge of an expanded program of vocational education which will probably represent as great an advance as the passage of the Smith-Hughes Act. Let us be certain that our conception of the program advances with the work and that we develop the most effective program possible for those who have entered upon, or are

W. HOWARD MARTIN

## Farmer Classes

WATSON ARMSTRONG

### An Entire Community Goes to School

WESLEY H. FARRELL, Teacher, Benson, Illinois

BENSON, a town of 350 people, is located in Woodford County, Illinois, 133 miles southwest of Chicago. The land is fairly level, the soil a rich, dark-brown silt loam. Corn, oats, legumes, soybeans, and livestock are produced. The farms average 190 acres in size.

The high-school district covers 44 square miles. The 63 high-school students come from a scattered trading area. Benson has no newspaper; however, some Benson news appears in the papers published in nearby towns. There are four churches in the town and one in the country. There is no high-school Parent-Teacher Association or civic organization to furnish a meeting place for the people.

Benson has had a department of vocational agriculture for seven years, and home economics two years. I have just completed my sixth year of teaching, five of which have been at Benson. The teacher of home economics has been at Benson one year. This is the third year she has taught.

The Rural War Production Training courses were the first adult classes ever held in Benson. In 1941-42, school authorities decided to offer courses in auto mechanics and in blacksmithing and welding. Not enough interest was shown to justify the auto mechanics class, but two courses were offered in blacksmithing and welding, with the local blacksmith as the instructor.

In the fall of 1942, several members of the school board, the principal, and I attended a meeting in which the war production courses were explained. The board left it to me to decide whether to offer the courses.

After looking the situation over and talking with several farmers, I decided that we should give the courses a trial. I began by making a farm-to-farm survey, explaining the courses, and inviting the people to attend. One woman remarked that, if her husband was going to take a course, she would like to go along and learn more about poultry. Two poultry courses for women resulted from her suggestion. Nine courses, including one each in swine production, electricity, blacksmithing and welding, and sheep shearing, and five in the repair of farm machinery, were offered for the men. A total of 120 men and women enrolled in these eleven courses.

During the school year of 1943-44, a council, consisting of three women, two of whom were from the farm and one from town, and five men, four of whom were farmers and the other a local hardware dealer, was appointed to assist in planning and carrying out the program. Three members of our board of education were also present. They did not vote but indicated what part the school board

#### Advisory Council Important

At the suggestion of the council, letters were sent to every town and rural mailbox holder. The men were asked to meet for registration on Monday night and the women on Wednesday night. A total of fifteen men and three women, eleven of whom I had personally invited, responded.

"If we're going to get the people in here," an interested farmer said, "it looks like you're going to have to go out and see them." I took him seriously and started out thru the community, stopping at every farm, talking over the courses with the farmer, his wife, other members of the family, and employees who were eligible to enroll. I asked what courses they would like to take and who would be good instructors. I also visited the people in town, explaining the courses in which they might be interested.

This trip proved very beneficial. I learned that the people wanted to have all the classes meet at least once a week at the same time, so the husband and the wife could come in together. This plan also gave the neighbors a chance to pool their automobile rides. Fathers and mothers said they could attend classes if some provision were made for caring for the children. They also wanted to meet on Friday nights since the children would not have school the following morning. Farmers wanted teachers who could talk farm language, and if at all possible, teachers with farm backgrounds. They wanted to do things with their hands as well as with their heads, and asked that the mechanics courses be taught again. The survey showed that the first of January would be the best time to start evening schools in this community. Most of the fall and winter work would be over, and the class work could be completed before the heavy spring work would begin. I was pleased to learn that the people wanted the same instructors back that they had had the year before.

With this information instructors were secured, and the first Monday in January was set as the opening date.

Since many of the teachers had to travel as far as 25 miles, the principal and I met with them in my classroom an hour before the regular meeting was scheduled to begin. Arrangements were made with each instructor for the meeting place of his class. The instructors asked questions concerning the program.

At 8 o'clock the entire group met in the gymnasium. Instructors were introduced and a general description was given of each course, explaining when and where each class would meet. There were 179 present. This number included 14 men and women from outside the high-school district, one high-school boy, and

high-school area. The group divided into classes and went with their instructors to the classrooms where they talked over with their instructors the things they wanted to discuss. They filled out gasoline ration sheets and, in some cases, elected council members.

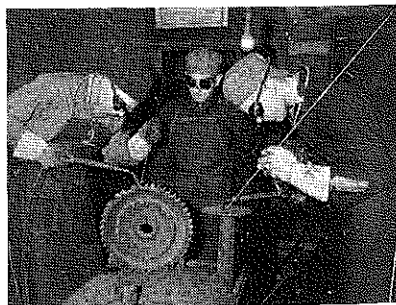
The hatchery man from Eureka, who had taught one of the poultry production courses last year, taught one again this year. This class was made up of women, with some of their husbands visiting once or twice. The women went on a field trip during which they culled chickens and looked at types of houses and equipment.

Four courses in repair of farm machinery were taught by mechanics. A local man in the threshing and shelling business taught the fifth class. The men were interested mostly in the adjustment and repair of tractors, corn planters, and combines.

The instructor in dairy production, who has a dairy herd and does general farming, is a graduate of the College of Agriculture at the University of Illinois. He was formerly a fieldman for the Brown Swiss Association and has also been an assistant farm adviser.

The teacher in beef production is a farmer with college training, who for the past 40 years has been a successful feeder of all types of livestock and a producer of good crops. He had taught beef production in three other schools.

The gardening instructor, a former teacher of vocational agriculture, is a graduate of the University of Illinois where he majored in gardening and small crops. He is engaged in the hatchery business. He rents a plot of ground in the country where he has a very productive and attractive garden. Most of the members of his gardening class were in his poultry class in Benson last year. His wife, a former teacher of home economics, took charge of the last meetings of the class. She discussed the canning of vegetables.

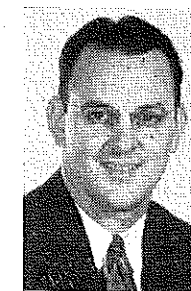


The course in welding was the most popular of the twelve courses in Benson High School

The course in electricity was taught by a Roanoke farmer who graduated from the Coyne Electrical School in Chicago. He has had 16 years of practical experience in electrical work. He is considered an outstanding farmer in his community, his special interests being livestock and the production of hybrid seed corn.

## Conditioning Students for a Farming Career

HUGH D. JONES, Teacher, Perry, Oklahoma



Hugh D. Jones

THE problem which faces each teacher of vocational agriculture when his students graduate is that of determining methods to continue assistance to the boys until they successfully become established in farming. The thought of the teacher is constantly, "Have I done everything possible for these boys during the time they were enrolled in high-school classes in agriculture?"

With these thoughts in mind, a survey was made of each boy who had had vocational agriculture in the Perry, Oklahoma, high school to determine the following: The needs for education in agriculture for out-of-school youth; the problems of young men who are becoming established in farming; the needs of the young men in social and recreational activities; and the effects of vocational agriculture upon the advancement of the young men in farming. It also evaluated the present program in vocational agriculture in the light of what these out-of-school young men have had to do in becoming established.

A more thorough understanding of this article is made possible by considering Perry's location. It is a typical town of about 5,000 population and is a county seat in north-central Oklahoma. Located in the central prairies and classed as being in a severely eroded soil area, Perry is a strictly agricultural center made up principally of general farming, including cash grains, dairying, and poultry.

In making the surveys each boy was personally visited and the information upon which the study was based was secured at that time.

Prior to the war, 74.7 percent of the boys who had studied agriculture in Perry high school were following farming as an occupation. The remaining 25.3 percent represented various occupations including that of attending agricultural colleges. At present 20.2 percent of them are farming in the Perry community.

#### Outcomes of Study

In summarizing and analyzing the surveys, problems of a varied nature were apparent.

1. Boys who did not have outstanding farming programs experienced a period of one to four years of instability following graduation from high school. In most cases the young men remained at home and helped their parents with their farming operations during rush seasons but afterwards secured jobs of various kinds such as working on the roads, or for pipe-line companies, or other employment. After two to four years these young men, in most cases, began farming either with their parents or on nearby farms.

arrangements to use the machinery on the home farm. Thus they were avoiding the initial heavy investment necessary to equip a farm with the proper kinds of machinery. Young men who were able to do this made progress more quickly than others who were unable to make such arrangements.

3. One of the big problems of the majority of the young men was that of financing their farming programs. Those who were fortunate in having parents financially able to set them up in the farming business made rapid progress.

4. Upon graduation, with school associations disconnected, the recreational and social activities of the young men were almost discontinued. About the only social activities in the community were attending church and the theater.

5. The need of continued education in agriculture was shown very vividly by the fact that each young man interviewed asked questions regarding certain problems which he had encountered in his farming operations at that particular time.

6. Within two to four years the young men usually married, thus making it necessary that they become established in farming so as to make a living.

7. A direct correlation was shown between success in farming, activity in Future Farmers of America, and the number of years in vocational agriculture. The boys who took agriculture continuously were more active in the F.F.A. and became more advantageously established in farming.

8. Young men as a rule invested their money in livestock rather than in machinery or land. This usually proved to be a good practice in that returns were made rapidly and an investment was soon built up large enough to justify the purchase of machinery.

9. Only one complete farm shop was found, although much work along the farm shop line was being done. Such jobs as house repairs, constructing small out-buildings and feeders, farm-machinery repairs, electrical work, and others, were being performed with various degrees of skill. This proved that additional training in farm mechanics would be profitable for this particular group.

10. Only one written contract was found. This fact indicates a need for more education in farm management, especially in relation to contracts and leases. As an example: One young man without a contract had landscaped the home, built all farm fences, terraced one-half the farm, established Bermuda grass on a 20-acre pasture, and other permanent improvements such as a milk house and a chicken house, amounting to approximately \$1,200, with no assurance that he would be able to live on the farm longer than one year or that the rent on the farm would not be raised as a result of the several improvements.

#### Program for Establishment

As a result of this study the Perry Department of Vocational Agriculture has

had taught three similar classes. He has been in business in Benson for the past 20 years.

A local farmer taught the class in swine production. He also taught the same course in Benson last year. He is considered a successful farmer, particularly in swine production.

The instructor in home economics in Benson was the only member of the night-school staff who teaches in day school. This was her first experience in teaching adults. She did a very good job teaching the course in food conservation and preservation.

A course in the repair of farm equipment used by women was taught by several people, especially skilled in this type of work. The women learned how to sharpen knives and scissors, how to solder, and how to repair electrical equipment.

I kept the classes supplied with materials; visited as many classes as possible each night; helped the teachers with teaching aids such as outlines of their work, movies, film strips, bulletins, and tools; helped arrange field trips; secured machinery, and saw that it was available for classwork. I also checked the heating, lighting, and water supply in the various buildings. I taught one course in sheep shearing in the spring after the other courses were completed.

The classes in welding and electricity met for three hours five nights a week, the machinery class met two nights, and the others one night each week.

The members of the class in electricity liked their work so well that they kept meeting and working after the school had closed. They re-wound and repaired motors; repaired toasters, electric mixers, waffle irons, vacuum cleaners; built chicken and pig brooders; and repaired refrigerators and radios.

All the production classes took field trips to different farms in the community.

#### Field Trips, Nursery, Supper

Classes were held in the high-school classrooms and farm shop, the grade-school building, local garages, the produce house, the blacksmith shop, and a vacated tavern. On Friday evenings, after the classes were over, educational movies such as "Soldiers of the Soil," were shown to the entire group in the high-school gymnasium.

The parents brought their children to the high school where they were supervised in play by two rural school teachers. Special children's movies were shown quite often.

The school closed with a potluck supper attended by 500 men, women, and children. While the women were getting the food and tables ready, movies were enjoyed by the men and the children. A program of music and group singing was provided by members of the different classes. Products made in the various classes were displayed. Movies of the classes at work were shown. Diplomas were presented by the president of the board of education.

A week after the classes were over, their blacksmithing class played a basketball game with the men in the electrical course, the proceeds being turned over to the Red Cross. Of course, the game was well attended.

The war production courses gave the Benson people an excellent opportunity

# Farm Mechanics

R. W. CLINE

## General Methods of Reaching Objectives in Farm Mechanics

M. K. LUTHER, Director of Agriculture, High School, Napa, California

TAKING the time to again state the objectives of farm mechanics, or at least to reword these objectives, is a half-hour's job that in itself is an excellent morale builder for the instructor and a very necessary step if we are to analyze our farm mechanics methods to find out which are the most effective under conditions found in our farm shops. Placing importance on any method of instruction can be done only if we use it as a means of reaching the objectives we have set up, and discuss it with these objectives in mind.

It has aroused my interest to set up my objectives in farm mechanics in terms of what we want the boy or adult to attain, and then to question myself as to what general methods I should or will use in reaching these objectives.

First, why am I teaching farm mechanics?

*Major Objectives:* I want the student to save money in his farming operations—to cut his costs of production.

*Immediate Objective:* I want the student to become established in farming. Farm mechanics should give assistance in this objective.

*Minor Objectives:* I want the student to possess farm mechanics consciousness; to

feel that farm construction, repair, and maintenance comprise a most important part of most farming programs.

I want him to believe that jobs well done are the only jobs that will give satisfaction, and to act accordingly.

I want him to realize that he should be a farmer first; that his mechanical ability should be used to make him a better producer of food; that there are some jobs that he had better have done or had better buy.

I want the student to develop the ability to buy tools, machinery, equipment, and repair supplies.

I want him to take pride in keeping his tools and equipment in good working condition.

I want him to be able to use effectively and safely those tools his farm will afford.

I want him to know that the shape or construction of any farm equipment must be determined by its use—that his equipment reflects this knowledge.

I want him to raise the standards and increase the satisfactions of farm living by the upkeep of his farmstead and his home improvements.

To reach these objectives, we all use certain methods in our farm shop. We

all want to use those in such proportion and combination as will give the greatest results in the shortest time. There is a number of these methods and probably all those serving as headings to the charts below are used by every teacher to some extent, either thru conscious planning or incidentally.

In the charts given below, the different methods are rated from two angles:

1. Their importance as to use with different age or "shop experience" groups.

2. Their importance when used in training students in different types of work.

In this particular chart I have attempted to balance the importance of the methods as I have used them in my shop work with their theoretical importance or what I think should be their rating if problems of adolescence, school administration or other practical considerations didn't interfere.

Nearly any teacher of agriculture, whether he teaches a combination of productive agriculture and farm mechanics or just the farm mechanics alone, will find cause to change this chart in some respects to fit his own conditions and his own philosophy. Any reader of this article will appreciate the fact that the greatest value of such a chart comes from making it from start to finish. The value gained from making such an analysis of methods so they can be used for students of different experience or on jobs of different types is the worthwhile thing.

METHODS USED TO REACH OBJECTIVES IN FARM MECHANICS

	Shop Work Individual by Student on (2) or Help by Practical Instructor Farm Jobs	Training by Instructor	Class Demonstrations	Classroom Discussions	Shop Tests	Farm Projects in Farm Mechanics	Practical Jobs for Entire (4) Class	Field Trips	Contests, State Meets, F.F.A. Days
According to Experience or Year in Agri.	Crosses indicate relative importance placed on the use of these methods for students of different age or experience.								
Ag. I (Fr.)	XX	XXXX	XXXX	XXX	XXX	X	XXXXXX	X	X
Ag. II (So.)	XXXX	XXXX	XX	XX	X	XX		X	XX
Ag. III (Jr.) & Ag. IV (Sr.) (1)	XXXXXX	XXXXXX	X	X	X	XX		XX	XX
Young Farmer or Adult	XXXXXX	XXX	X (3)	X					
According to Type of Work	Crosses indicate relative importance of each method in putting over certain types of Farm Mechanics work.								
Basic Skills and Abilities	XXXX	XXXX	XXXXXX	XXX	XXX		XXXXXX		X
Equipment for Farm (5) and Project	XXXXXX	XXXXXX	X	XX		X		X	XXX
Machinery Repair, Care, etc.	XXX	XXXXXX	XX	XX	X	XXX		X	X
Buildings	X	XX		XX	X	XXX		X	
Misc. Jobs (6)	XX	XXX	X	XX	X	XXX	X	X	

(1) Ag. III and IV being combined has no special significance except to suggest that two or more classes are often combined. Ag. I, however, should not be combined with any other class.  
 (2) Jobs brought in by the student or suggested by the instructor.  
 (3) Depends on the adult group, the type of work, and the preferences of the instructor for certain methods.  
 (4) Examples: milk stool, tin nail box, gate hook, hammer handle. To develop basic skills and abilities.

## Community Farm Shops Always Open

HARRY R. LOVE, Teacher, Watertown, Tennessee

FREE access to a shop and adequate tools with which to repair farm machinery is always a question of importance to farmers living several miles from a blacksmith shop. The significance of this problem was recognized by certain farmers in Tennessee who had been members of two local FPWT farm machinery courses and who lived five or six miles from the nearest blacksmith shop.

Thru attendance in the FPWT courses, these men had learned how to repair their machinery and to do similar tasks. Upon completion of the course they felt the need for a shop conveniently located and properly equipped. Such a shop would save them time, labor, money, and transportation. Therefore, the matter was discussed with the teacher of vocational agriculture who had supervised these classes. Thru his efforts suitable arrangements for open shops were made.

### New Shop Constructed

In the Commerce community a merchant agreed to build a shop, 20 by 30 feet, alongside his store and to be responsible for keeping it open each weekday. Thirty-five farmers agreed to pay a small sum of money to cover the rent and the cost of electricity. To date many plow points and axes have been sharpened and many mowers, wagons and plows repaired.

### Old Shop Rebuilt

Farmers of the Statesville community rebuilt an abandoned blacksmith shop to provide facilities for the course in repairing farm machinery and to have a shop constantly available to the group. A retired blacksmith was drafted to conduct the course and to keep the shop open so that repair work could be done at any time. In this community the farmers agreed to pay a small membership charge which would buy the needed supplies. The blacksmith does repair work for nonmembers and also for members wanting him to do their work for pay. This shop is used by about 35 farmers.

### Shops Successful

In both of these communities many repair jobs are done as farmers go to the store for supplies thus saving time and gasoline. It is much easier for them to get their heavier equipment to the community shop and to do their own work than to go six miles to a blacksmith shop. During the week from five to 10 men come daily to do some work; on rainy days this number is larger. No tools are allowed to leave the shops. By meeting a definite need in these two communities the shops have proved successful and are appreciated by the surrounding farmers. The teacher of agriculture supervises them, thereby having much closer contact with local farmers than would otherwise be possible. He also finds that the people respond to other activities of the department such as giving their boys better

## Terminology Again

DR. GEORGE P. DEYOE of Michigan State College voices his disagreement to the proposals made by the editor in his first editorial with reference to terminology in agricultural education dealing with the student's practical work. Rather than the simplified terms adapted to a boy's needs, Doctor Deyoe prefers a more involved terminology. We gladly present his statement of his position.

### Deyoe States His Position

I find myself inclined to disagree a bit with your proposals for terminology for supervised farming programs. The overall term of "Farming Programs" is all right, altho I prefer that the word "supervised" be incorporated because in the best sense it implies a relationship to instruction. (I think we should include as farming activities for our program only those activities in which we can claim an instructional or supervisory relationship of some sort, to which I presume you would agree.)

For the parts of the farming programs, I'd agree that there is considerable confusion in terminology. However, your proposals do not take into account the evolution of terms which is taking place. Furthermore, you leave out of the picture any distinct category for projects of the improvement type, which I feel is one of the most significant trends in recent years, altho it had its beginning back in some of Stimson's work in Massachusetts a third of a century ago. To me, the three categories of (1) ownership projects, (2) improvement projects, and (3) supplementary farm jobs seem to portray quite clearly the broadened concept of the individual program of supervised farming. Terms closely akin to these are found in present-day literature in many states and on the national level (including "Evaluative Criteria for Vocational Education in Agriculture" and Vocational Education Bulletin No. 225. "Directing Vocational Agriculture Day-School Students in Developing Their Farming Programs.") I feel that this evolutionary trend in terminology must be recognized in any proposals for the future because this is the way a living language grows.

The terms "projects" and "continuation projects" as you use them are confusing because they differentiate only on a time basis. Projects of the ownership type may be continuation projects, major projects, contributory projects, or any one of a number of different types, altho I think too much differentiation of this kind may add to the confusion. Of course, we want to encourage boys to have continuation projects, but the decision to continue them is affected by various conditions and may not (perhaps should not) be definitely decided at the outset in all cases.

Your use of the term "new practices" is confusing because we would hope the boy would use new practices in all phases of his program. Perhaps a definition of the terms suggested earlier would be helpful, so here goes. (I might emphasize that I do not claim that these are original with me.)

1. *Ownership projects.* (Sometimes called "productive" or "productive enterprise" projects.) A productive project is a busi-

ness project which is a part of a production cycle of the farm enterprise. It is owned entirely or partially by the boy. (In the latter case, it may be a partnership project.)

2. *Improvement project.* An improvement project is an undertaking of considerable scope which improves the real estate value of the farm, the efficiency of the farm business or of a farm enterprise, or the living conditions of the farm family.

3. *Supplementary farm jobs.* These are jobs in addition to those already included as normal parts of a student's productive and improvement projects, which are undertaken by the boy for additional experience or skill or for improving the efficiency of the home farm.

I might say that these terms are readily grasped by normal boys, altho I wouldn't expect them to state the formal definitions given. I have conducted discussions with many groups of boys and have seen many teachers do so. With proper orientation, the boys recognize these types of experiences as normal parts of their programs. For all three types of activities, the teaching focuses upon the development, selection, and use of approved practices suitable for the situation.

I suspect we will continue to find considerable difference between states on these and other terms in our field. Perhaps, a national committee on terminology would help in securing uniformity, if uniformity is necessary or desirable. I feel there is a wholesome trend toward greater uniformity, and that to inject a set of terms somewhat contrary to this trend would be unfortunate.

## Supervisory Changes

In Hawaii—Warren Gibson succeeds W. H. Coulter.

In Minnesota—C. O. Ayers takes the position held by Harry J. Peterson.

In Nevada—Kirby E. Brumfield fills the vacancy caused by the resignation of R. B. Jeppson.

Other changes are noted in our directory.

## Editorial Comment

(Continued from page 83)

"Rights" makes liberal provisions for credit for these young men. It deals generously with those who desire further education. Up to this time, the policies to be followed and the plans for its administration have not been announced. Doubtless they will be announced in the near future. We should keep ourselves informed in order that we in turn can keep eligible farm youth informed. Teachers of agriculture might be of considerable assistance to returning farm boys to the end that loans be used advantageously. Older teachers will recall the many failures that resulted from loans to veterans after the other war.

Teachers of agriculture can be instrumental in bringing nonoperating land owners into contact with young men desiring to rent a farm. They may lend assistance to young men desiring to purchase farms. It would seem desirable for the teacher of agriculture to maintain a list of desirable farms for sale. By so doing, he might expedite the solution of

# Studies and Investigations

E. B. KNIGHT

## Establishment of Former Students of Vocational Agriculture on the Home Farm

MARVIN J. NICOL, Teacher, Marengo, Illinois

THE difficulties encountered by former students of vocational agriculture in becoming established in farming should be a major concern of educators in the field of vocational agriculture. An investigation was conducted to determine the various factors associated with establishment of former students as laborers and partners on the home farm. The study should be of value to teachers of vocational agriculture who want to improve their guidance techniques.



Marvin J. Nicol

### Procedure

Fifteen high schools were selected in northeastern Illinois. Each had departments of vocational agriculture that had been established at least 15 years. The teacher of agriculture in each of the 15 departments furnished a list of all students who had taken two or more years of vocational agriculture and who had graduated between the years of 1931 and 1940, inclusive. Only those established in farming either as a laborer at home working for definite wages or as a partner at home with a definite agreement were selected. One hundred students were selected in each status.

The students were interviewed personally by the writer for the purpose of filling out a check sheet which gave information concerning such items as the following:

- Name, age, and present address.
- Present farming status.
- Number of years of vocational agriculture taken in high school.
- Marital status.
- Farming status of father at time of student establishment.
- Age at time of establishment in present status.
- Occupational choice when entering high school.
- Occupational choice when leaving high school.
- Occupational status of former student prior to present status.
- Total number of brothers, sisters, and number of brothers at home.
- Financial condition at start of farming in present status.
- Number of years in F.F.A. and offices held.
- Number of productive enterprise projects conducted.

Education beyond high school.  
Approximate monthly wage or income.

### Age and Education

The age distribution of persons in the laborer and partner statuses indicated that in the age group under 21 years, there was a greater tendency to become established as laborers. In the middle group, 21-24 years, the trend toward the partner status became stronger whereas in the last age group, over 25 years, there appeared to be little inclination to become established as laborers but a strong trend toward establishment as partners.

Deyoe (2) found that former students of vocational agriculture most likely to be farming were those who took two years or more of vocational agriculture. Kenestrick (3) found that increasing enrollment in classes in vocational agriculture showed a percentage increase in farming with each additional year of enrollment, the greatest difference occurring between three and four years. The writer found that the amount of vocational agriculture taken in high school was positively associated with satisfactory establishment of young men in farming altho the highest status included in the study was that of partnership.

Hoopes (4) concluded that the quality of the supervised practice program was associated with becoming established in farming. Deyoe also found that former students of vocational agriculture most likely to be farming were those who had one project or more per year. Dobervich (5) summarized by stating that the usefulness of project work in helping young men in establishment in farming increased with the number of years of instruction in vocational agriculture. The writer found an indication that the number of projects conducted in high school was positively associated with the status of young men becoming established as laborers and partners.

### Part-Time Education

Part-time education appears to be growing more popular as a means for the young farmers to solve their problems thru the assistance of the instructor in vocational agriculture. It was found by Clark (6) that a large number of established young men in his study had availed themselves of part-time education. Dobervich (5) found that 18 percent of the young men had been in part-time classes which were carried on by the local instructor in vocational agriculture.

The median number of years of part-time enrollment for the laborer and partner groups included in the present study

rollment in part-time classes was closely associated with establishment in farming. The number enrolled in part-time classes in the older age group, over 25 years, showed a decline because many departments in the survey area did not introduce part-time classes until late in the 1931-1940 period.

### Evening School Education

Clark (6) found that a number of former students of vocational agriculture had availed themselves of the opportunity to enroll in evening school work. Dobervich (5) found that 64 percent of the young men had participated in evening school classes conducted by the regular instructor of vocational agriculture. The present study definitely indicated an association of evening school attendance with establishment in farming. It is evident that laborers do not participate in evening school to the extent that partners do.

As was the case with Dobervich (5) the evening classes were found to be more popular than part-time classes. A relatively large number of partners under 25 years of age were in evening school attendance.

### Farming Status of Father

Kenestrick (7) found that young men from tenant farms advanced in farming status only in rare cases. There was slightly more advancement by those from full-owner farms than those from part-owner farms. Hoopes (4) found the farming status of the father to be a very definite factor affecting establishment in farming. Evans (8) concluded that the higher the economic rating of the parents, the easier it was for young men to become established in farming.

The farming status of the father at the time of student establishment is shown in Table I.

Table I. Farming Status of Father at Time of Student Establishment

Status of Father*	Laborers	Partners
Owner or Part-owner	44%	66%
Tenant or Manager	55	27
Other Status	1	7

\*As defined by the Sixteenth Census of the United States, 1940.

These data indicate that the farming status of the father at the time of student establishment is associated with the status reached by the student. A larger percentage of the sons of owners or part-owners became partners than became laborers, whereas in the case of sons of tenants or managers the situation was reversed with regard to farming status attained.

### Occupational Status Prior to Establishment

considerable work about the farm while attending school were most likely to become established as farmers. Dobervich (5) found that 16 percent of 157 young farmers had worked on the home farm as laborers before becoming established in farming.

The occupational status of the laborers on the home farm prior to establishment as laborers was also determined. The most frequent occupational status of the laborer group prior to establishment was working at home with an indefinite allowance. Fifty-nine percent of the young men were included in this group.

Dobervich (5) concluded that experience received on the home farm and experience obtained by working out as a hired hand were regarded as the most important and least important factors, respectively, in helping young men become established in farming.

The occupational status of the partners on the home farm prior to establishment as partners is shown in table II. The findings of the present study indicate that

Table II. Occupational Status of Partners Prior to Establishment as Partners

Occupational Status	Number
At home with indefinite allowance	14
Farm laborer away from home	6
Farm laborer with specific wages at home	34
At home with income from one or more enterprises	37
Nonfarming occupation	9

either being at home with income from one or more enterprises or being at home as a farm laborer with specific wages is the most likely status to precede establishment as a partner on the home farm with a definite agreement. Those working away from the home farm for wages appear the most unlikely to become established as partners on the home farm.

### Monthly Wage or Income

Hoskins (9) found the average yearly wage of young men working at home for definite wages was \$439. Dobervich (5) reported the mean annual income from enterprises carried on the home farm was \$169.

The median monthly earning or income for the laborer group included in the present study was \$31-\$45; for the partner group the income was over \$60. The distribution of laborers within the age groups indicated that there is danger of laborers becoming stalemated at a comparatively low income. In the partner group, however, the young men appear to be progressing relative to monthly income as they mature in age.

### Amount of Capital Required

The median amount of capital prior to establishment as laborers was between \$50 and \$99. In the partner group the median amount of capital prior to establishment was between \$400 and \$499. The median amount of savings prior to becoming established in the laborer group was between \$50 and \$99. In the partner group it was between \$300 and \$399.

establishment of young men in the partner status. Lack of capital appeared to be a limiting factor which kept a number of laborers from progressing to the more desirable status of partner. The median amount of financial assistance secured in the laborer group was less than \$50; in the partner group, between \$300 and \$399.

These findings suggest that lack of capital is a limiting factor in establishment in farming. The writer feels that it is the responsibility of the teacher of vocational agriculture to exercise various ways and means of assisting former students in securing the necessary capital for establishment.

### Other Factors

It appeared that marriage was associated with establishment in farming in that a considerably greater number of married young men were established as partners than as laborers. However, there was no conclusive evidence to indicate that the association was a function of marriage, rather than age, especially in the two older age groups—21 to 24 years inclusive, and over 25 years.

Major offices held, rather than enrollment, in F.F.A. chapters and 4-H clubs, appeared to be factors slightly associated with establishment of young men in farming in the laborer and the partner statuses.

The size of the home farm apparently was not a factor in the establishment of these young men in the laborer and the partner statuses.

Young men seemed most likely to become established in farming in both the laborer and the partner statuses on farms which were the predominating type in the community. These farms were also the most highly specialized of the types listed in the survey.

Young men who were established as partners showed a greater preference for farming as an occupational choice, both when entering and leaving high school, than laborers. It was interesting to note that there was a decreasing difference in farming as an occupational choice between partners and laborers during high school.

It was the opinion of the young men that experience gained working on the home farm and experience gained by working out as a hired hand were the most important and least important factors, respectively, in helping young men to become established in both the laborer and the partner statuses.

Partners indicated that they had more written contract agreements than laborers. The survey indicated that as a rule capital was required for establishment in the partner status. A number became established by means of their own savings, some combined their own savings with financial aid and a few were established entirely through financial aid.

### Literature Cited

1. Thesis of author written in fulfillment of the requirements for the degree of Master of Science in Agricultural Education, Iowa State College, 1943.
2. Deyoe, C. P. Young Men from Michigan Farms. Michigan State Board of Control for Vocational Education. Bulletin Number 256, 1939.
3. Kenestrick, H. G. Dare We Face the Findings of Research? Agricultural Education Magazine, 11:134-135, January, 1939.
4. Hoopes, L. B. Factors Affecting the Establishment in Farming of Former Students of the Vocational Agriculture Department at Muscatine, Iowa. Unpublished M. S. thesis. Library, Iowa State College, Ames, 1937.
5. Hoskins, E. R. Young Men in Farming. U. S.

## Conditioning Students

(Continued from page 91)

ing their young men to become established in farming.

1. During the high-school period in vocational agriculture each boy will be assisted in developing a comprehensive farming program which should eventually lead to establishment in farming. An interest in farming should be developed and a financial investment accumulated large enough to overcome the period of two to four years of instability immediately following graduation from high school.

2. The graduating boys will be advanced into a "Young Farmers Association." With such an association functioning, the following should be accomplished:

- a. The boys' education in agriculture will be continued.
- b. Assistance will be given them with their production and managerial problems.
- c. Help will be given in interpreting new and changing conditions in agriculture since changes are constantly taking place.
- d. The needs for social and recreational activities will be met.

3. The instructor of vocational agriculture will visit these young men frequently to assist them with their individual problems on the home farm. For example, the instructor may secure new bulletins which would be of great benefit on subjects of particular interest to the young man visited.

4. The instructor will solicit the cooperation of parents in planning and carrying out a farming program which will assist their sons to become established in farming.

- a. Assistance will be given in working out contracts and partnership agreements.
- b. Assistance will be given in securing land and livestock for expanding the farm business.
- c. Help will be given in the keeping of accurate records and accounts.

5. In cases where young men on leaving school are unable to farm at home or begin farming immediately, assistance will be given in securing employment on a good farm.

6. An educational program will be initiated whereby the landlords will become acquainted with the importance of leasing their farms to young men with ability on an equality basis. The instructor will aid in making leases in which a thoro understanding of the responsibilities of the landlords and tenants will be assured. Improvements in the farm and farming operations can then be inaugurated which will be of mutual benefit to landlord and tenant.

coming Established in Farming by Young Men Trained in Vocational Agriculture. Unpublished M. S. thesis. Library, Iowa State College, Ames, Iowa, 1939.

6. Clark, Loyd T. How Fifty Young Men Became Established in Farming. Agricultural Education Magazine, 12:132-134, January, 1940.
7. Kenestrick, H. G. Some Economic Factors Affecting the Establishment of All-Day Students of Vocational Agriculture in Ohio. Department of Agricultural Education, Columbus, Ohio. Department of Agricultural Education, 1936. (Mimeographed Summary of Study.)
8. Evans, Arthur H. Factors Affecting the Establishment in Farming of One Hundred Former Students of the Vocational Agriculture Department at Hudson, Iowa. Unpublished M. S. thesis, Library, Iowa State College, Ames, Iowa, 1937.
9. Hoskins, E. R. Young Men in Farming. U. S.



# Future Farmers of America

A. W. TENNEY

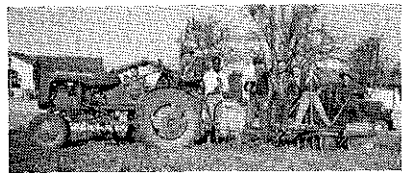
## Paso Robles F.F.A. Finds Opportunities

CLIVE O. REMUND, Instructor, Paso Robles, California

THE Future Farmer Chapter of Paso Robles, California, has found a way to help improve the looks of our city and at the same time give material aid to our all-out war effort.

The director of agriculture and adviser for the small, but active, Future Farmer chapter, was faced with the problem of having city boys in his freshman and sophomore classes. These city boys had neither the room nor the facilities for farming programs such as the farm boys were able to carry on.

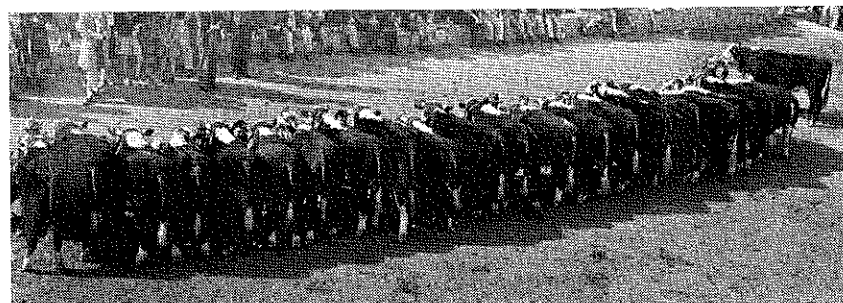
These boys suggested that they secure permission from the city authorities and the owners of the vacant lots in town to allow them to clean up the lots, plow them, and seed them to oat hay.



Paso Robles town boys prepare vacant lots for seeding

Further plans involved the most practical ways of spending the proceeds from the sale of the oat hay. They finally decided to purchase livestock to feed out or start a breeding herd. This decision came after studying the principal agriculture enterprises of the locality. They found these percentages of total income: (1) almonds, 22 percent; (2) wheat, 18 percent; (3) beef, 16 percent; (4) dairy, 14 percent; (5) hogs, 12 percent; (6) poultry, 12 percent, and (6) miscellaneous crops, 6 percent.

Faced with the problem of securing the necessary equipment to undertake this project, they decided to promote a scrap-iron drive which covered the whole community. This added \$240 to their treasury. Besides, they salvaged enough material to build in shop a plow, an offset disk, a float, a grain drill, and a dump rake. A mower attachment was purchased for the chapter tractor and the boys were ready to start work on the vacant lots.



The lots were first picked over by hand and all trash removed. The ground was then plowed, disked, and seeded to oat hay. Each boy paid a small rental fee for the use of the chapter equipment. Later this same equipment was rented out to farmers at nominal fees so every piece of equipment more than paid for itself.

This spring and summer the tractor mower was in almost constant use, being driven by some chapter boy, and 385 acres were mowed that otherwise would have been left standing due to the shortage of farm labor. By this method \$288.75 was added to the treasury. When the hay on the city lots was ready the boys did their own mowing, raking, selling, and hauling.



Here the sons shine in the sunshine

The outcomes of this project were many-fold. The boys had city lots amounting to 20 acres in hay and made themselves a net profit of \$240; they solved their farming program problems; they learned to repair and service farm equipment; they plowed 142 city lots, 50' x 125', for Victory Gardens; they helped beautify their city by cleaning up vacant lots, and they helped the war effort by producing needed livestock feed.

## An Excellent Record

Of the graduates from Canal Winchester, Ohio, High School in the past six years who have completed more than two years of vocational agriculture, 57 percent have been awarded the State Farmer Degree. Ralph E. Bender is the adviser and also president of the Ohio Association of Teachers of Vocational Agriculture.

## Grayson, Ga., Chapter Supplies Potato Plants

AFTER four years of selling certified potatoes by our chapter, the farmers in our community look to us as a source of supply for plants. As a result of our interest in supplying a large portion of our community with certified plants each year, our entire community has become sweet potato conscious.

During this past year the farmers constructed an electric potato-curing house of 3,000-bushel capacity. From the experience in curing over 2,000 bushels, farmers and F.F.A. members saw definite examples of potatoes which were grown from certified plants and those which had not been certified.

After seeing the difference in keeping qualities of clean and non-clean plants, our chapter has, as one objective, either to sell certified plants to the farmers in our community or to help them select their bedding potatoes and see that they are treated with corrosive sublimate or semi-san bell.

## Spencer, Ia., Hog Project

MEMBERS of the Spencer, Iowa, Future Farmer Chapter, at a loss as to what they should have for a co-operative project this year, decided that, since hogs were probably the most profitable livestock, it would be a good idea for the chapter to raise swine co-operatively. Four and one-half acres of red clover pasture were rented from a farmer near the edge of town. One of the main obstacles was that of securing water for the pigs. Three different holes were bored by the boys before sufficient water was secured. The chapter built three double-houses in the school farm shop and purchased three single houses.

The chapter had two members with poor facilities for project work. These boys were eager to take shares in the project and do their share of the labor. Due to a shortage of labor it was necessary for the instructor to assist the boys some during the three vacation months. For this, the instructor was allotted three shares in the project. Nine sows were purchased, and these farrowed 90 pigs of which 85 were raised. The pigs did nicely from the start and weighed an average of 39 pounds at 56 days. The pigs were fed by the self-feeder method. Forty-one head of pigs were marketed on October 15 at an average age of 5 months and 1 week and weighing an average of 202 pounds. The remaining 44 pigs will be marketed at a weight of 225 pounds. A total of approximately 18,000 pounds of pork will be sold from the project with an estimated profit of \$900. The project has been quite successful both from the stand-

point of the project and the ability of the boy. Approximately two weeks are allowed for each boy to outline and prepare his job for teaching. Of course the time will vary according to the enterprise or subject being studied. A typical outline follows:

## Getting Freshman Projects Started Early\*

ONE large department of vocational agriculture in California has an amazing faculty for getting freshmen started in extensive farming programs almost immediately after enrolling in the department. This success is the result of a carefully-planned program which might be followed with profit in many other communities in the United States.

The school is Modesto High School, located in Stanislaus county at the northern end of the rich San Joaquin valley. The school district is approximately 10 miles by 15 miles, virtually every acre tillable and under irrigation. The farms are predominantly small—10 to 40 acres—but intensively cultivated. Principal enterprises are dairying, alfalfa hay, fruit for drying or canning, dry beans, and some small units of swine and beef cattle. Most farms are well-diversified.

There are very few tenant farmers in the district, giving a stable type of population. There is little movement for farmers from one farm to another. Land is very high in value, a 40-acre farm with average dairy buildings and land prepared for alfalfa or planted to this crop sells readily for \$25,000.

There are 13 elementary schools in the Modesto High-School district, in addition to those within the city itself, which has a population of about 15,000. The school operates an extensive bus system, adequately serving every part of the high-school district. Out of a total enrollment of about 140 students of vocational agriculture per year, from 50 to 75 will be freshmen. This year, with many schools reporting decreasing enrollment, Modesto's freshmen class was larger than last year.

The matter of getting freshmen started right doesn't wait until fall. Every spring the wide-awake Modesto Future Farmer chapter holds a "spring roundup," just before elementary school graduation. One of the chapter leaders goes to each elementary school and invites all of the boy graduates to the "roundup." On this visit names and addresses of all farm boys graduating from the eighth grade are obtained.

The "roundup" consists of games and entertainment, talks by Future Farmers, and refreshments. A trip is made thru the department which includes a four-room building with a large shop and a separate chapter co-operative, which did a \$27,000 business last year in feed grinding and mixing and in supplies for agricultural mechanics.

Following this goodwill event, the high school sends a counselor out during the summer to visit every elementary school graduate who indicates on his registration blank whether or not he plans to enter agriculture. These names are turned over to the teachers of agriculture. However, the teachers of agriculture are not limited to this list and visit all farm boys who will enter high school in the fall. The boys can change their course to agriculture at any time.

During this visit the teacher of agriculture—there are three full-time men—talks with the boy and his parents on the home farm. He discusses project possibilities. The chapter facilities for helping

## Lazy Teachers

K. L. RUSSELL, Teacher, Neosho, Missouri

TOO tired to do a first rate job of teaching after those late hours at evening school? Are the boys a bit bored with the usual classroom procedure? If so, let them teach a few jobs while you sit back and enjoy some real live-wire discussions. For three years I have let my junior and senior boys have a fling at managing the class. Much to my surprise the boys sometimes do a better job than I do. Properly managed, there develops a lot of competition and a quality of study seldom realized when the program is entirely a teacher procedure.

Three years ago I found myself up against the problem of teaching soils without a set of teaching plans prepared. A lot of reference material was on hand but procrastination had the upper hand. Rather than burn the midnight oil I put the boys to work preparing the lessons. The idea seemed to take so well that it is now a part of each year's work. A few changes have been made, but the program is much as it was the first year when in desperation I put the boys to work doing what I had always considered my job.

We first proceed to divide the study into as many jobs as there are boys in the class. This is done as a group and when the final selection is made the jobs are written on the board. Each boy is then assigned a job according to the difficulty

arc emphasized, such as the co-operative feed mill, group purchases of dairy calves, vaccinating and milking-testing equipment, agricultural mechanics facilities, and so on. Many youngsters already own some stock or secure some as a result of the summer visits.

Usually in August, the chapter holds a "melon bust" for all prospective freshmen. This is followed up the first or second week of school by a freshman reception. As a result of these many activities, the boy quickly feels at home, knows about the co-operative services, and has enough confidence to launch a large program.

By the end of the first quarter, 90 percent of the boys have productive projects—and what projects! They recited them at a freshman meeting recently—five cows; two cows and 10 feeder pigs; a cow, calf, five acres of alfalfa; and so on. The boys may borrow money from the Production Credit Association with the chapter acting as trustee. This helps boys to get into large projects quickly thru sound business procedure.

The emphasis on projects is continued thru all years in school. There is a class unit on projects where production and financing are discussed. The whole class visits the projects of the other freshmen. Because of the diversified nature of the farming, the freshman often takes over the entire operation of the home dairy unit, the home poultry flock, the swine on the farm, or a truck-crops enterprise.

Modesto recently applied for eight State Farmer degrees. The eight applicants have a total net worth of \$15,546.82—almost \$2,000 per boy. This shows that getting freshmen started early really pays dividends in getting boys

of the job and the ability of the boy. Approximately two weeks are allowed for each boy to outline and prepare his job for teaching. Of course the time will vary according to the enterprise or subject being studied. A typical outline follows:

- List of references
- At least 25 study questions
- Fifty or more true-false test questions
- Fifty or more completion questions
- Grade check sheet containing each boy's name and a column for problems answered, discussion, test grades, and final grade
- Complete list of approved practices

We found in practice that some jobs do not lend themselves to so many questions while others require more than this number. This has continued to be the goal regardless of the jobs under consideration. Some boys will require considerable help in wording suitable study questions and test questions while others can do an excellent job. A few boys will lag behind and not be entirely finished when teaching of the jobs begins, but with encouragement they usually are prepared when their job comes up for study. We are fortunate in having a ditto machine in our department so each boy can write his tests in ditto ink and prepare a copy for each member of the class.

After the boys have finished their preparation the class study begins. Each boy opens his part of the program by allowing the others to suggest problems pertaining to the job at hand. These are written on the blackboard by the boy instructor and the rest of the class copies them for study. When the class has exhausted its supply of problems the boy instructor completes the list from those previously prepared. The assignment is now studied in the usual way and the answers to all the questions are written and handed in for grading by the boy instructor. This grading by the boys makes for a lot of learning. Just one little mistake in grading a paper is pounced upon and books pulled out of the shelves to prove the point. When sufficient time has been allowed for all to be handed in, the discussion is held under the leadership of the boy instructor. This is good practice in any class room.

One of the best parts of the program is the period allowed for putting the boy instructor on the spot. Each student is allowed to ask one question of the instructor. Extra credit is given each boy who can ask a question about the job that the instructor cannot answer. Part of the boy instructor's grade is determined by his ability to answer these questions. I need not say that considerable searching is usually done in order to trip the instructor of the day.

When the discussion of a job is finished the tests are given, the papers graded, and the grades recorded. All this is done by the boy instructor.

My job is to keep things running smoothly and to add emphasis to important facts not sufficiently covered. During the discussion I keep track of the discussion grades for the boy instructor so that he can devote his time to the class.

Perfect? No. But try it sometime. If it clicks, a lot of extra interest and learning is added. If it doesn't, not much is lost.

If it should happen that the student would lose interest in the procedure and begin to do careless and indifferent work, then that would mean that I would have to go to work again and plan some

