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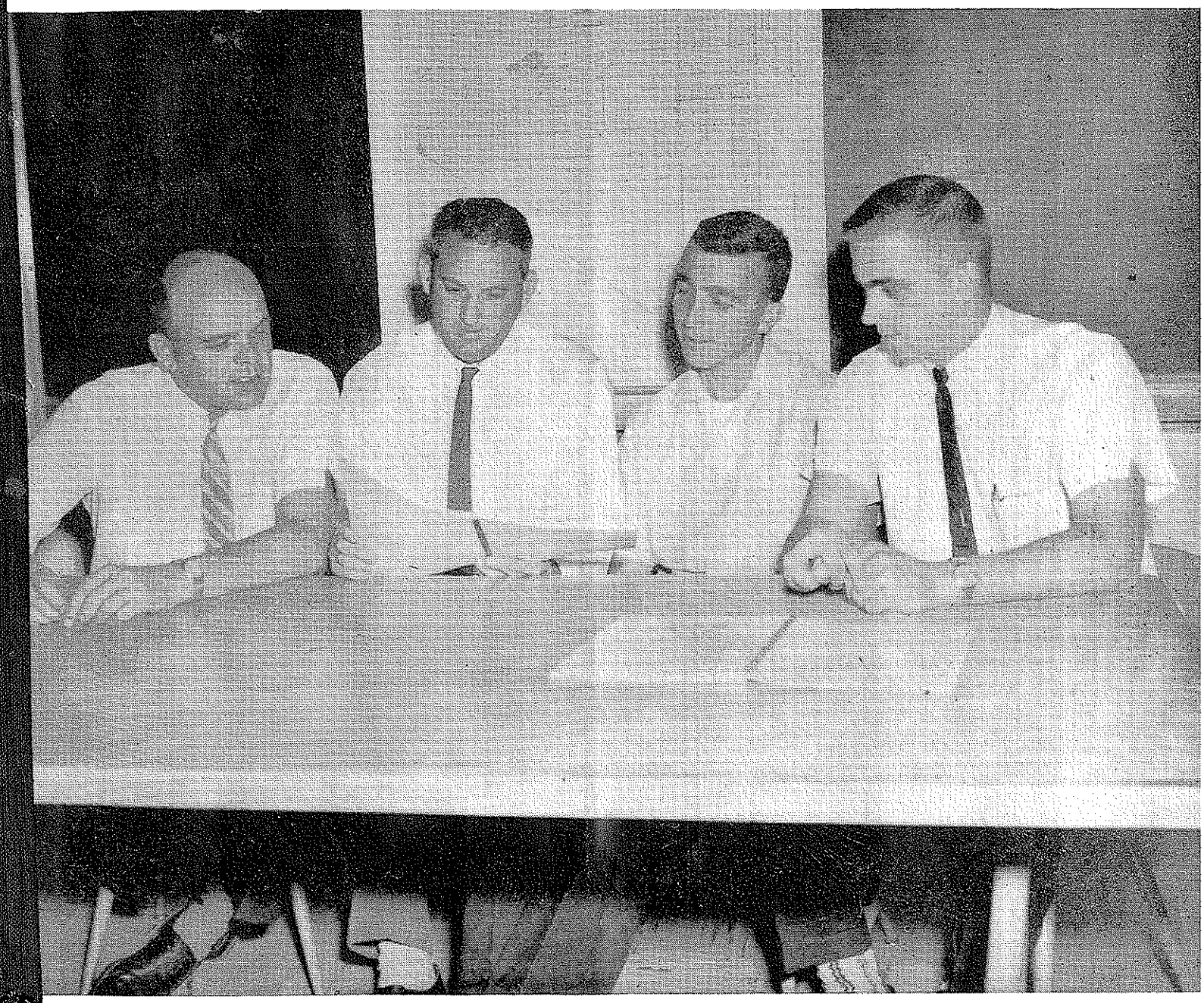

Featuring—Planning Local Programs of Vocational Agriculture

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IN THIS ISSUE

THE COVER: The principal and the teachers of vocational agriculture at Coolidge, Arizona, High School are shown explaining the departmental program to a student teacher. This is only one of the many ways in which the five-year program of work has been used to further vocational agriculture. L to R: Jack Dumond, Principal; Cy Henry and John Mayfield, teachers of vocational agriculture; and Pat English, student teacher in Agricultural Education from the University of Arizona. (Photo by R. W. Cline)

Editorials

Guest Editorial

The Need for Teachers to Plan Local Programs

CLARENCE E. BUNDY, Teacher Education, Iowa State University.

The need for careful planning of vocational agriculture programs has long been emphasized. In order to train present and prospective farmers for occupational proficiency, it is necessary to plan programs of education that will take them from where they now are to carefully planned occupational objectives. Since the persons involved reside in the local community and many will continue to live and work in the local community, it is important that teachers of vocational agriculture give proper emphasis to the local community in planning the instructional program.

Two developments in secondary education during the past ten years have perhaps motivated some teachers to decrease local emphasis in program planning. The tendency to decrease the number of hours of class time for high school students in vocational agriculture has in some cases encouraged teachers to make their courses general. Less time in the classroom has been available for supervised study and fewer class field trips have been possible. The increased emphasis upon the value of science has perhaps encouraged some teachers to place emphasis upon the scientific principles in vocational agriculture to the extent that less instructional time is devoted to the application of these scientific principles to production and management problems on the individual farms of the persons involved. Without question these two developments tend to make vocational agriculture less vocational.

The developments in agricultural technology, automation and mechanization have led to continuing decreases in farm numbers and increased farm size. These developments have been given much publicity. Usually data summarizing the national situation are used to develop a rather depressing and pessimistic viewpoint concerning opportunities in farming and in agriculture. Few teachers have specific information concerning the changes that have come about in regard to numbers of farms or size of farms in their respective communities.

The United States Census of Population for 1960 and The United States Agricultural Census for 1959 publications are available and provide information concerning the number and ages of farm operators, and

From The Editor's Desk . . .

The Meaning of Program Planning

Some plan, of some type, in the minds of some people guides to some extent the activities of every vocational agriculture department. The problem of the teacher becomes one of deciding upon the best type of plan, the persons who should develop it, and the way it should be used. This issue which has as its theme "Planning Local Programs of Vocational Agriculture," includes a variety of ideas and approaches to this important problem.

Program planning is a term which has become a part of the vocabulary of agricultural education and which is used to describe a social process which includes teaching but which goes beyond teaching. The need for such a process becomes apparent, a man asks himself such fundamental questions as:

What should I accomplish for my community? In what direction should my people be going? What should I help them to do? What should they be able to do for themselves? How long should it take to accomplish these goals?

Questions of this type are not unique to teachers of vocational agriculture. They also face your school administrator, your pastor, your county agent and on Main Street the manager of your supermarket and the plant manager of your local industries.

These questions are not especially new. They have been asked and have been answered by leaders of men throughout history, who have been successful in moving groups of people from where they are to where they want to go. These questions become important to the teacher of vocational agriculture who sees his responsibility for education to the extent of involving the participants in his program in a unified effort which results in the growth of individuals and the entire agricultural community.

A variety of terms are applied to the process of democratic leadership including management, direction, guidance, supervision, and administration. Regardless of the term used, the process involves certain common tasks which might be described as:

- ☐ The establishment of a clear cut aim supplemented by meaningful educational objectives.
- ☐ The involvement of all persons involved in the program in helping to formulate it and to carry it out.
- ☐ The development of an appropriate plan and organization for the program.
- ☐ The coordination of internal aspects of the pro-

Need to Plan Programs . . .

of farm boys, and information concerning the number, sizes and characteristics of the farms of the individual counties. This county information is not being used effectively by many teachers of vocational agriculture. National figures concerning the characteristics of farm operators and of farm businesses are not applicable to any given local situation. County information from the census report is much more valuable to teachers in planning local programs. For example; some economists indicate that nationally not more than 10 percent of farm youth may have an opportunity to become established in farming. Several studies have been made of individual counties and of individual communities in Iowa. They indicate that 30 to 45 percent of the farm boys reaching the age of 18 each year will be needed to replace farmers who die, retire, or leave farming, assuming that we will continue to have an annual decrease in farm numbers equivalent to that of the past five year period.

In order for teachers of vocational agriculture to serve their function in providing guidance to high school students and young adult farmers, it is necessary for them to have information concerning the local situation. Teachers of vocational agriculture should be encouraged and given assistance in making studies of their individual communities. The members of the high school and out-of-school classes should be given an opportunity to aid in making these studies and in planning the instructional programs needed in the respective communities.

Local planning is necessary for teachers of vocational agriculture to provide guidance services related to occupational adjustment. There are other considerations. Problem solving has been demonstrated to be one of the most effective methods of teaching in vocational agriculture. It is important that the problems involved in the instructional program should have local significance. In the main, they should be the problems of individual members of the groups involved. In most communities the entire instructional program can be planned around the problems that exist in that community or in situations in which the students will likely find themselves in the near future. Instructors, after surveying their communities will be able to anticipate more accurately the number of individuals who will likely remain in the community and the number who will be entering occupations outside the community.

Much greater emphasis must be placed in the farm management approach in planning local instructional programs. It is much more difficult to teach the management aspects of farming than the production practice aspect. As a result, many local programs of vocational agriculture have not given proper emphasis to farm management. The home farms of the boys and the local farms of the communities are ideal laboratories for the teaching of farm management. The more closely the instructional program in farm management can be associated with the local community, the more fruitful the program can become.

The farm management approach in teaching vocational agriculture necessitates a re-allocation of time on the part of instructors. Freshmen and sophomore students in agriculture are not sufficiently mature to cope with many management problems. Teachers will need to devote considerably more of their instructional time to the young and adult farmer phases. In most states only five to ten percent of the young and adult farmers are enrolled in vocational agriculture classes. Local programs for young and adult farmers involving farm record keeping and analysis should be encouraged. There is evidence that teachers of vocational agriculture have not carefully planned programs for their local communities since only a small percentage of the farmers are enrolled in continuing education classes and since very few teachers have organized programs in farm-record keeping and record analysis. Furthermore, we have in many communities, teachers who are devoting at least a part of their time to the teaching of nonvocational subjects. Instructors should be encouraged to plan local programs of agricultural education which will necessitate the use of perhaps more than one instructor. The use of two or more instructors will facilitate carrying the types of programs which will be necessary for teachers to meet the demands in the present day changing agriculture.

Vocational agriculture can serve a dynamic purpose during the next 20-year period, if each instructor will study his community carefully and will plan and conduct an educational program which will meet the agricultural education needs of the persons residing in the community. □

Meaning of Planning . . .

gram as well as coordination with other related programs.

- ☐ The establishment and maintenance of effective channels of communication.
- ☐ Provision of continuing, realistic evaluation of the outcomes of the program as well as ways and means of securing them.

In Agricultural Education, we call this process Program Planning. It offers the teacher of vocational agriculture a means of maximizing his efforts in agricultural education in his community. □

Thirty Years Ago in the Agricultural Education Magazine

Thirty years ago this July, Carsie Hammonds wrote "Vocational teaching with its year-round program represents a digression from what has been custom. It is up to the men engaged in teaching vocational agriculture, to prove that the summer salary is justified and up to them to make the summer salary justified."

H. M. Hamlin said in an article "If agriculture teachers were devoting more of their attention to the improvement of their classroom teaching they might not need to worry so much as they apparently do about publicity and enrollment."

The Executive Committee of the National Board of Trustees of the Future Farmers of America were received by President Herbert Hoover on the White House lawn.

Thirty years ago this August, W. I. Myers, Professor of Farm Management of Cornell University, wrote "The time has passed when farmers could solve successfully the problems of adjustment by knowledge gained from experience alone. If the future farmers now in school are to successfully meet the challenge of their times, their business plans must be based on reason—on sound economic planning and not on habit, tradition, and emotion."

E. D. Fahrney of Stapleton, Nebraska, discussed salvaging material to use in farm mechanics. He stated that due to a bank failure, funds were limited for purchasing such materials. He mentioned securing sheet metal from old windmill fans and using Ford magnetos and rake teeth for material for chisels and punches, as well as odd pieces of iron for making gate hooks, neckyoke rings, clevises, and "a dozen other things." □

Local Planning: A Growing Need In Vocational Agriculture

H. E. BEAM and C. C. SCARBOROUGH, Teacher Education, North Carolina State

In a democratic society it should be a common occurrence for interested citizens to participate freely in planning institutional programs, especially programs which affect them and for which their tax monies have been allocated. The people of this nation have, through their political representatives, approved the expenditures of public funds for programs of education in agriculture. It is reasonable to expect, then, that people who are associated with agriculture will participate in planning educational programs in vocational agriculture to meet the needs of those persons who need and can profit from such education. The extent and intensity of participation will, of course, vary widely.

Changing Needs

As the social and economic conditions which affect a community change, the felt needs of people in this community change. These conditions, in turn, are greatly influenced by rapidly changing occupational opportunities. Social and economic changes, as well as occupational opportunities, appear to be closely associated with the educational attainment of the citizens in a community. Farm people are usually at a disadvantage in this respect as compared with urban and rural nonfarm groups. They have traditionally lagged behind most other segments of the population in educational attainment. Thus, modifications in local educational programs must accompany socio-economic changes in a community if these programs are to continue to effectively serve the community and its people.

Local Leadership Important

Who should be expected to supply the leadership necessary to ascertain and implement the changes needed in vocational agriculture programs in a period of rapid social and economic change? A procedure for dealing with this problem was advocated in a recent study dealing with an analysis of socio-economic trends as an aid to program planning in vocational agriculture.[1] Most of the thirty-one trends identified in this study were judged by the writer and ten selected educators to be positively related to the importance of *local planning* of programs in vocational agriculture. Actually, it was agreed that 24 of the 31 trends increased the importance of local planning. Three examples of these trends were:

(1) The percentage of people in North Carolina classified as "rural farm" is declining, but the percentage classified as rural nonfarm and urban is increasing rapidly.

(2) The number of people engaged in nonfarming agricultural occupations is increasing, while the number engaged in agriculture production is declining.

(3) New and expanding industries are increasingly utilizing the available labor force in North Carolina and are offering new opportunities for many of the under-employed workers in agriculture.[2]

Persons at the community level should be in an ideal position to identify changes which may be needed in educational programs. They are likely both familiar with and concerned about the situation. Authorities from outside the community might qualify themselves to serve as consultants to local groups in replanning an effective program. Nevertheless, even if it were administratively practical for outside persons to assume *full* responsibility for modifying a local program, it would be unwise for them to do so. Such a procedure would tend to deny a group of free people the opportunity to participate in solving their own educational problems in the area of agriculture.

[1] Homer E. Beam, "An Analysis of Socio-Economic Trends as an Aid to Program Planning in Vocational Agriculture in North Carolina," (unpublished dissertation, University of North Carolina, Chapel Hill, 1961).

[2] *Ibid.* pp. 193-194.

This advisory group has been active for many years in planning the local program in vocational agriculture.

A Local Plan

One solution to this growing need in vocational agriculture might be an extension of the "State Plan" idea. As a condition for the receipt of federal grants for vocational agriculture programs, state boards of education adopt and submit a State Plan to the United States Commissioner of Education. This plan is basically a description of the state operations relating to programs of vocational agriculture. The plan establishes some assurance of reasonable efficiency in the operation of the program. An approved State Plan is, in effect, a contract between the United States Government and the state concerned.

An agreement between state and local administrative units similar to the State Plan procedure would encourage local people to accept more leadership in program planning. It seems reasonable that the local people would then assume greater responsibility for the effectiveness of a program which they had helped plan. The local plan could, moreover, provide for the unique needs of an individual community as well as providing for common elements which seemed to be desirable in programs throughout the State. Teachers of agriculture, principals, and superintendents, have suggested such a plan would be practical and that it should contribute materially to the improvement of programs in vocational agriculture.

What Is Included in a Local Plan?

An outline for a local plan for vocational agriculture would serve as a guide for local planners as well as a basis for accepting the local plan at the state level. Some of the items in such an outline are indicated.

I. The Community Situation.
Mapping the school district. Organizations. Population.
   A. Agricultural Situation in the School District.
   Classification of farms. Mechanization. Markets. Agricultural Businesses.
   B. Educational Situation.
   Status, Attitudes. Detailed information on present Vo-Ag program, adults as well as boys.

II. Projected Program in Vocational Agriculture.
   A. Objectives of the program.
   General. For adults. For high school boys.
   B. Local Policies.
   Relationships. Specific duties and responsibilities of the teacher (s) of agriculture.
   C. Programs Planned for Each Group.
   High school. Adults. Other groups. Plans for evaluating each program.
   D. Major trends which may affect vocational agriculture.
   Changes expected. Adaptation of Vocational Agriculture.

The procedure in developing a local plan will vary. There must be an *initiator*. This will be the responsibility of the local school administrator, but he may delegate this to someone else. A professionally capable person is needed for *coordinator*. A *steering committee* of 8 to 14 members will be needed to assume major responsibility for program planning. Additional *study groups* may be needed for securing needed data not readily available. A *consultant* is extremely important for the local planners, especially if they are inexperienced.

Summary

Local planning of programs in vocational agriculture is a sound procedure in a democratic society. If local people do not know how to plan effective programs, they can learn. State leaders have the responsibility of furnishing a planning guide and consultant help as needed. The local plan would serve the same purpose for the local program as the state plan does for the state program.

It is believed that more responsibility by local people for planning will result in more effective programs in vocational agriculture. □

A Study of Community Farming Opportunities As a Basis for Program Planning

EVERETT L. CLOVER, Teacher of Vocational Agriculture, Webster City, Iowa

Development of an effective vocational agriculture program is largely dependent on having it based upon existing needs and conditions in the community. Obtaining factual information for the necessary background is recognized by most vocational agriculture instructors as one of their primary responsibilties.

To obtain the necessary information regarding opportunities for establishment of young farmers in farming in the Webster City Community School district, the writer collected the factual information and made a study which would enable him to be more accurate in at least some phases of his planning. This article is a summary of the procedure and results of that investigation.

Area Studied

The school district studied is located in the northwest corner of Hamilton County in north-central Iowa. It covers 179.2 sections of good corn land or 114,688 acres. There are 112,000 acres operated as farms with 459 operators farming an average of 244 acres.

Farm Consolidation

To help us determine the reduction of farm numbers to expect, we were fortunate. Dean A. Brown, a graduate student in economics at Iowa State University, had studied the farm consolidation rate in our own local county in 1957 as part of his thesis research. Brown reported that during the three year period 1952-1955 69 farm consolidations occurred in the county involving an original 137 units. Most of these consolidations resulted in units of between 240 and 320 acres, a point near which practically all

economies of crop production can be achieved under the conditions then existing in the area. An average of 1.1 per cent of the total farms in the county were eliminated each year.

Assuming that consolidations of this magnitude were progressing at a proportional rate in the area of the Webster City Community School district, there would be an estimated decrease of five farms per year reduction. To be on the conservative side, to allow for increased use of modern technology, we have used a reduction figure of six farms per year.

Number of Graduates Per Year

Records in the vocational agriculture department covering the last twenty years indicate that an average of ten boys have graduated each year who chose agriculture as their major field. In 1961, Dr. Walter E. Crissey, Webster City High School principal, made a follow-up study of all the graduates of the school in 1952, 1953, and 1954. He also found that an average of ten boys were graduated each year who had chosen vocational agriculture as their major field.

Number Desiring Farms

To determine the number of vocational agriculture graduates who would likely want farms, we reviewed several studies. A study made in Iowa in 1959 by the Iowa Vocational Agriculture Teachers Association very well reports what was found in most of the other studies. This was a study covering a 10 year period from 1943 to 1952 to determine the occupational status of vocational agricultural graduates. Of the 2,497 graduates studied, 47.6 per cent were engaged in farming, 9.6 per cent were employed in related occupations, and 43.7 per cent were in occupations not related to agriculture. Approximately 58 per cent of the graduates were either farming or in related occupations. Of those who were farming, 17.2 per cent were owners, 60 per cent were renters, 18.9 per cent were farming in partnership, and 3.9 per cent were hired hands. We may be very conservative if we say that 50 per cent of our own vocational agriculture graduates will want farming opportunities. Will there be five farms available each year in the district?

Survey of Farm Operators

A survey form was designed to obtain other needed information in order to develop an accurate picture of the opportunities to farm in the district. It included nineteen items regarding farm status, acres operated, education of the operator, time of anticipated retirement, off-farm employment, years as farm operator, years in other occupations, labor hired, and ages and education of sons and daughters.

The personal interview, using the survey form, was chosen as the means for collecting the necessary information. The operator was first verbally informed regarding the purpose of the study and then asked the questions on the survey form. As responses were made they were recorded on the survey form by the investigator. Approximately 20 minutes were required per interview. The entire population of 549 farm operators in the district were interviewed during the month of August.

Selection of the desired comparisons was made and the information was coded. The coded information was transferred to IBM cards so the equipment and facilities of the Iowa State University Statistical Laboratory could be utilized in obtaining tabulations for fifty-seven tables. Following are some of the findings and discussion of our interpretation of them.

Findings and Discussion

We were especially interested in the responses of the older operators for these will likely retire during the next ten years and the farms they have been operating will be consolidated with other farms or will provide opportunities for new replacement farmers. We were also interested especially in the younger operators for their activities indicate how young men have become established in farming during the last ten years.

There were 50 operators who were 61 years of age or older, whereas, 51 were 30 years or younger. The mean age of all operators in the district was 46 years.

Farming Status of Operators

A total of 323 farmers operated some land as tenants. As the age of the operator increased the amount of land rented decreased. There were 180 who owned land and 64 of these owned less than 81 acres. One-half of the 50 operators over 60 years of age owned less than 161 acres, whereas, no operators under 26 years of age owned land. There were only 47 men operating tillable land in partnership and 13 as hired operators.

Small farms were, in the main, being operated by young men getting established in farming or by elderly men approaching retirement age. Some farmers operating small farms were employed off the farm on a part-time basis, but not many of these were the older operators. Approximately 33 per cent of the operators were farming 160 acres or less, 46 per cent were farming 161 to 320 acres, and 21 per cent were operating farms of 321 acres or more. These data may indicate further consolidation of farms in the future, more off-farm employment by operators of small farms, or more intensive and specialized farming operations on small farms.

Education

A higher percentage of operators with an eighth grade education or less owned farms. This may have been due to the fact that those men were older and may have had more capital. The fact that operators in this group owned smaller farms, than members of other groups, may have been the result of their purchases of farms some years ago when small farms could have been operated more profitably as economic units. More education may have resulted in ownership of larger numbers of acres because those with more training realized the economies of the larger farms and were able to make decisions to achieve them. The younger men pursued more educational training than farmers who had been farming for many years. It may be assumed that the farmers with college training, since they had large operations, used their knowledge and capital resources to lighten their work load rather than hire additional labor. Opportunities for operating in partnership appeared to be more plentiful for those who had a total operation above 240 acres and who had a high school diploma or some college training.

Other Factors

We have related just a few comparisons which have been drawn from this study. There are many more items which were very useful in program planning and guidance of young farmers. We could speak with more assurance and accuracy regarding opportunities in the district.

During the first 10 years of farm operation the young farmer would not normally be expected to obtain ownership of more than 80 acres. Renting generally resulted in more acres

operated and new operators should consider renting as a means of increasing the size of their business. The findings, further, indicate that young farmers should consider continuing their educational programs if they wish to operate large farms. There may be more competition for smaller farms as the operators of smaller farms had more sons. There was a tendency for farmers having more sons at home to be employed off the farm a higher percentage of the time. Since approximately one-third of the operators had previous full-time employment in occupations other than farming, it is likely that many farm youth will return to the farm after spending a period of time in nonfarm occupations.

Retirement

These data indicate that 92 operators would reach retirement age of 65 by 1970, or an average of 9.2 operators per year. Using life expectancy tables in force by life insurance companies, it was predicated that 2.3 deaths would occur per year in the district. The number of operators who anticipated leaving farming for reasons other than retirement would average 2.5 per year. It was estimated that a total of 14 operators would leave the farms each year for the next ten years.

Conclusions

Because of the pattern of farm consolidation, approximately six farms will be eliminated each year. This leaves eight farms for new young farmers. We will have an average of near five young men graduating from the vocational agriculture course each year who will want farming opportunities. This will leave approximately three farms for others wanting farms. It seems reasonable to conclude from this investigation that there will be ample opportunities for farm boys in the Webster City Community School district who desire to farm for at least the next ten years. It seems reasonable to conclude, also, that continued consolidation would cause the number of farms between 240 and 320 acres to increase, in order to provide for more economical use of machinery, power, and labor.

Most of this article has indicated the value of this study in the guidance phase of the program. There are many other items that came out of this study. There were no corporations either as owners or as operators. The largest operation was 1160 acres farmed by a man and his son. The instructor has a much better all-round understanding of the farming picture in the community.

Program planning can come much closer to meeting the needs of the community. We recommend that similar studies in the local districts would be very beneficial to guidance and program planning activities. □

Programming Activities

LAWRENCE F. HALL, Teacher Education, Kansas

The whole vocational agriculture program is built on the premise that we learn to do by doing.

Doing is an activity.

We do not have activities just for the sake of being active. There are more "activities" needing to be done than there are hours in which to do them. We select those activities that will contribute most to the development of the boy.

Vocational agriculture is known in terms of achievement with named, identifiable activities or programs.

What does the term "program" mean to you? Let us define "program" as an activity for which definite accomplishment is sought and achieved. Many selected, named program activities characterize a worthwhile total program of vocational agriculture. Therefore, identify your vocational agriculture program in terms of major named selected activities.

Selecting and Processing Program Activities

1. Give each program activity a name. It must have identity.
2. Select those activities that you are sure you want to include in your vocational agriculture program.

   Be receptive to ideas.
   Exercise initiative.
   Be resourceful.
   Think in terms of major activities.
   Think in terms of activities that must be continued—those that are traditional and are now popular and worthwhile.
   Think in terms of activities that exist, but need to be built up.
   Think in terms of major activities that should characterize a strong balanced program of vocational agriculture.
3. If an activity is important enough to be placed on the selected list, you cannot afford not to give enough time to it to make it a success. The only way to save time is by organization and experience. Most selected activities are repeated as established features of the vocational agriculture program.
   Success is achieved with the first doing of an activity. This experience plus subsequent repeated experiences gives high efficiency with basic program activities.
   You cannot carry as many activities as you will be able to carry as an experienced teacher. The big thing is to select the *right* activities and really "go to town" with them.
   Keep worthwhile, popular activities going; add new activities. Build strength into significant activities that are below par.
4. The beginning teacher must be himself. He will succeed in terms of his own personality and how he determines his own success pattern with specific programs of activities.
5. Set up desired accomplishment to be sought and carried out. Visualize the end results you want to accomplish with each named activity—"Think big."
6. Set up standards—
   Think and do a quality program.
7. Set up an accomplishment schedule. What must be accomplished by a *certain time*. It may be today; it may be next week; it may

be this semester; it may be in a three or four year period.
A successful activity must be objective and calendared.

8. Set up and process each activity to the point where you feel you have a workable plan of organization. Strive to be efficient with your present repertoire of activities, then expand your repertoire of activities by adding one more, then another selected carefully processed activity so your program will have scope and balance.
9. Set up each activity on an individual-doing level.
As teachers, we strive for the development of each boy as an individual. Boys must see for themselves the value of the activity and have a desire to carry it out.
They must feel they are participants and have responsibility as individuals, as members of a special interest group, as class members, as FFA members, as leaders, as cooperators.
10. Set up for the beginning of the activity.
Each activity will be a "beginning" for someone—beginning students, beginning parents, beginning teachers.
Even an activity already underway may have a new "beginning" from the standpoint of new concepts, new leadership, new standards for achievement.
11. Set up a plan for the progressive development of the activity. Plan for a distribution of time and effort to keep a high level of interest. It is comparatively easy to get initial interest; it takes planned thought and effort to keep a continuous high level of interest. Interest is dependent on goals sought. Give recognition for progress made, contributions made, good work done and achievement attained. For continuing interest, constant effort and measurable encouraging progress must be achieved.
12. Set up a good environment for the activity.

Set up the activity with the contributive thinking, knowledge and understanding of participants and those interested in the school activity program including; administrators, parents, all resource people, students and the public.

There will be recognition to the degree there is knowledge of and participation with the activity.

Desire must be achieved. "This is the kind of activity we like and should have in vocational agriculture." Recognition must be given to each person and to each goal, standard, or phase achieved. □

Efficient Use of Time and Effort in Teaching

ERNEST TARONE, Head, Agriculture Division, Modesto Junior College

The efficient use of time and effort in teaching, is one where efficiency is hard to achieve, and difficult of measurement. Efficiency here is personally *felt* by the instructor, whether or not he can measure it with a yardstick. It is a frustrating thing to feel at the end of the year that you have not accomplished much, in the classroom. This feeling of inefficiency may lead to more of the same, because of the nature of agriculture teachers who are, after all, people. Even the instructor who thinks he is accomplishing much, and is able to measure it, in reality may not. When you try to measure classroom teaching in terms of units, you may be sadly led astray. Number of pages read, number of bulletins covered, number of enterprises discussed, hours devoted to study, lecture, study or reading, or even average grades of students on examinations can mean nothing, unless the time was devoted to study of proper things in relation to correct objectives. *The achievement of as many proper objectives as possible in the time available would seem to be a reasonable measure of efficiency.*

Let's direct our thoughts to the variable that we can do something about, objectives.

Sin #1, the greatest sin in teaching, *is the lack of objectives.* If the time you have available is not directed toward specific objectives, then surely you will have a feeling of inefficiency, lost time and effort and of accomplishing nothing. If there are no mile posts, you'll never know when you have gone a mile. If there are no stated objectives, you'll never know when you reached one. Having achieved that feeling of nothing accomplished, the tendency is to race your engine trying to make up for the deficiencies you feel. Like the definition of a fanatic, "One who, having lost sight of his objectives, redoubles his efforts to achieve them." You see what happens. This thing feeds and breeds on itself. The more you feel inefficient in directing time to objectives, the more inefficient you become.

Let us define objectives in terms of one overall objective and later specific course objectives. If we are going to communicate, we have to understand what we mean by our words.

First, the overall objective—We need to keep this in mind as we work on specific objectives. *We are trying to develop educated persons in Agriculture.* What is an Educated Person? *One who knows where to get knowledge when he needs it and knows how to organize knowledge into definite plans of action.* If we keep this before us, it will be a big help in developing specific course objectives.

As to specific course objectives, I think I can best make my point by exaggerating. You come to the end of the four years. You have one hour left; you have taught nothing about Livestock. You will never have these boys again. What would you teach? What would you do with that hour?

Castrate Hogs?
Clip a Steer?
Teach the Importance of Livestock?
Have a Speaker or Film?
Balance a Ration?
Describe Breed Differences?
Read a Pedigree?
Go on a Field Trip or to the Shop?

I want to list four (4) basic points about which you would teach, and then discuss these points:

1. Your decision would be made easier if you had specific objectives concerning livestock.
2. These objectives ought to be in some order of importance.
3. The objectives ought to be directed toward the student personally, and at his ability level.
4. There are different kinds of course objectives.

The second cardinal sin in teaching is not rating the material we teach in order of importance. You can't teach everything so be sure you teach the most important first. In terms of our overall objective above, obviously you would not spend the hour castrating hogs or clipping a steer.

The third sin in teaching agriculture is ambiguous or loosely stated course objectives. An objective should be so stated, that it is personal from the student's standpoint, and that it pinpoints exactly what will happen to the student. Objectives should be stated in terms of the student. They should make clear exactly what you want the student to know, be able to do, or feel. For example, objectives stated as follows: "The student should," or "he should" will assist the teacher to get to the point. If time is short teachers need to get to the point.

Sin #4, for wasting time and effort, *is to not gear your teaching objectives to the students' age or ability.*

There are 4 principal types of objectives:

Objectives involving knowledge, stated thus: He should know the relationship of, or understand the principles of, or be familiar with.

Objectives involving skills, stated thus: The student should be able to solve, to apply, to analyze.

Objectives involving experiences, stated thus: The student should see, feel, hear. These often apply to life situations, the kind of objectives you often have for your field trips or movies.

Objectives involving attitudes and appreciation, stated thus: With these you build a desire, or a sense of proportion concerning the world about him. The student will appreciate—will feel—will be concerned about.

Concerning specific course objectives, I would like to emphasize this: they are not attained incidentally; they have to be worked at.

Sin #5 is to include excess or superfluous objectives in your teaching plans. If you have objectives that are superfluous baggage, if you are not working at them, strike them out. Nothing can contribute more to a sense of not accomplishing than a long list of objectives you never really intended to get to. Be realistic. Include only those you can do.

Now, keeping our overall objective in mind, here are some suggestions that should lead to efficiency in teaching.

First, organize yourself as to what ought to be taught, what enterprises, areas of importance, etc. This is an individual job for each teacher in his community.

I would not presume to suggest what is important in your community, or even how you go about determining this. No matter what you discover is important, I am not concerned so much with what you teach, as I am in how you rate the importance of what you teach. Determining the importance of enterprises you will teach in a community is important; without this properly done, you will be wasting time in trying to develop objectives on an unrealistic base.

Second, group your enterprises into areas, i.e., livestock such as sheep, hogs and beef. Then, in building your objectives for these areas, do so around the management decisions your students will make in livestock, especially if they can be used in more than one area, i.e., sheep, hogs, beef.

Remember, time is our fixed factor. Around one enterprise or area, teach the management facts that will apply to others. Remember, the educated person can look up the information, if you teach him how to use it. Quit snipping twigs when you should be sawing branches.

Sin #6, is to waste time on small relatively unimportant jobs. Don't cover barley, then wheat, then alfalfa, oats, and under these, seed bed preparation for each, or marketing for each.

Don't compute acreage for barley, then later alfalfa, etc. Do it once and do it right, perhaps using one enterprise in an area. The basic principles apply to each crop.

You don't have to balance a ration for a cow, chicken, pig, sheep. Teach "the how" of balancing a ration and he can apply the principles as needed, if he is taught where to get the information.

If you are teaching dairying, what kinds of decisions will the student have to make, day to day, in administering his ranch, regardless of kinds of cows, or age, or crops involved? Or, in orchards, what day to day decisions apply to orcharding, regardless of type of tree? Or, crop production, regardless of type of crop?

Teach the "How To" of management, stated as specific objectives of the kinds we discussed. (How to balance a ration, not balance a ration for sheep or lambs). Rate these, teach a few well, and go home feeling you have accomplished something, and you did get the important ones covered in relation to time available. □

Editing-Managing Board Raises Subscription Price

The serious financial plight of the *Agricultural Education Magazine* was called to the attention of the profession following the December, 1961, meeting of the Editing Managing Board. Since that time little financial improvement has been made. As a result, effective May 16, 1962, the board took this action:

1. The August and September issues are to be combined to save one month's printing costs.
2. The annual subscription rate has been increased from $2.00 to $3.00.

These two steps should return the Magazine to a favorable financial condition during the coming year.

The Magazine has served our profession in a fine manner in the past. With continued support of workers in agricultural education, it should provide even greater service in the future.

R. W. Canada, Chairman

Editing Managing Board

A Total Program In Vocational Agriculture

DUANE ERICKSMOEN, Teacher of Vocational Agriculture, Yerington, Nevada

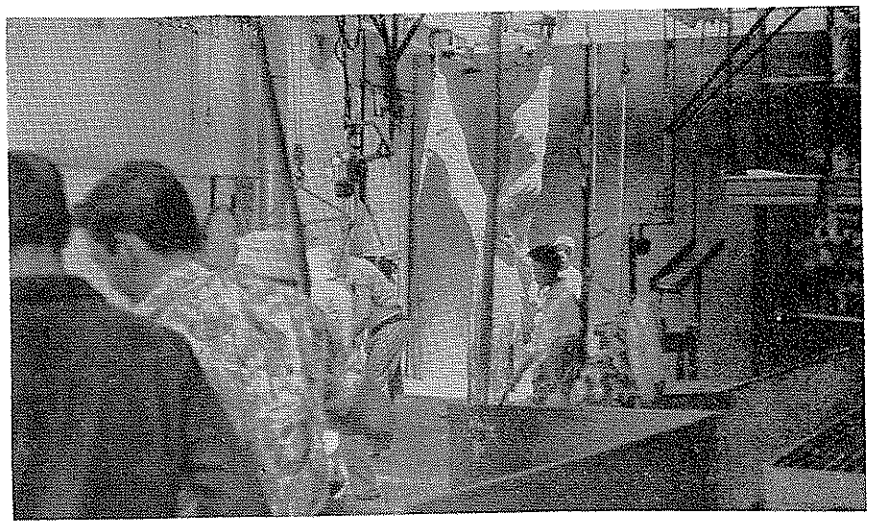
It is a common belief that a *TOTAL PROGRAM* in vocational agriculture simply includes a day school program and an FFA Chapter. This is a gross misbelief in that it does less than half the job. The other greater than half lies undone.

The day-school program, which is the first part of the *total program,* is the heart and soul of vocational agriculture. This was the program for which the Smith-Hughes Act was created. This is the program for which departments are built and equipped, for which teachers are hired and funds are allocated. The day-school program is generally broken down into classes of Ag. I, II, III, IV. Agriculture I should include the basic jobs in agriculture, such as general agriculture, basic farm records, some livestock and crop production, basic farm mechanics and some leadership training. Agriculture II should include a more complex study of crops and animal production, i.e., animal nutrition, livestock and plant breeding; farm accounting, new skills in farm mechanics and advanced leadership. Agriculture III and IV should have the main emphasis placed on farm management. This is usually the most challenging part of vocational agriculture teaching, trying to instill in students the value of developing the ability to make the correct decision at the right time. Also included, should be the development of semitechnical skills in farm mechanics.

Presently included in most day-school programs are classes of Related Agricultural Occupations. Classes in R-O can be taught vocationally in much the same manner as the distributive education classes. Students should first complete classes in Agriculture I and II, then after learning the basics of agriculture, may select either farm management through Agriculture III and IV, or select an occupation through further studies in R-O. After the student has completed his course of study in R-O, he is placed with one of the agricultural agencies or companies located in the community. This would approximately double our present scope in vocational agriculture.

The second part of our *total program* is the Future Farmers of America. The FFA, though clearly related to the day-school program is actually "extracurricular." Too often, an instructor teaches FFA and leaves his day-school program as extracurricular. This is indeed wrong despite the strong argument that no other class in America teaches leadership as exuberantly as the FFA. I think club organization and leadership activities should be taught in class, but practiced to perfection in the FFA. This might at first sound like double-talk, but let me explain further. Preparation for FFA contests can be exceptionally time consuming. For example, livestock selection and judging are taught in Agriculture I or II in the livestock production classes of "Selecting and Securing Good Foundation Stock." Sometime before the district or state contests, all students compete in trial judging to see who will represent the chapter as the team. This is done in FFA and is extracurricular. There is no student classroom time lost due to teaching only four students to perfection. Then the teams must practice on their own time.

The ultimate relationship of FFA to the total program is that it serves as a source of common interest for all students enrolled in vocational agriculture and as a goal for the perfection of skills learned in the program. The FFA is the organization to which the boy belongs to develop his abilities in leadership and to engage in community activities.



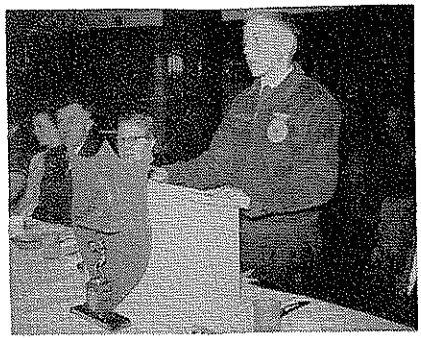
A total program can be built upon the foundation of useful practical teaching of high school students.

The third part of this so-called *total program* includes young farmers' classes and the Young Farmer Association. The definition of a "young farmer" which I like is: "An out-of-school farm boy or young man *not yet established* in farming." Young farmers should not be an age grouping, but rather an interest grouping. They should all have at least one interest in common, that of becoming established in farming. A progressive, long range program can then be established whereby the students may develop the managerial skills needed to own or manage a farm. On-the-farm instruction is even more essential with the young farmer than with the day-school student.

Many communities often lack the organizations or clubs to which a young man can be associated. Some clubs will admit them as members, but stifle any trends toward leadership. The older men run the club, and the young man feels left-out. The Young Farmer Association can be the answer to their plight. The organization should be established and run by the members, with the instructor acting as advisor. If the members are married, their wives should be encouraged to attend the meetings and classes. Many of the problems encountered, and subjects taught, should be considered by both husband and wife. Joint action over critical decisions adds strength to a farm business.

When the young farmer has completed a certain number of hours of classroom instruction, making good strides towards becoming established in farming, he should graduate with a certificate so stating that fact. After graduation, he may continue in your *TOTAL PROGRAM* by enrolling in your adult farmer classes, the fourth part of the program. The adult farmer is one who *is established* in farming. He will enroll in an adult class because he wants more information on some phase of agriculture or wants to learn a new skill, both of which will improve his farming business. The adult course may or may not be a systematic course of instruction. A class of farmers interested only in the latest agricultural information may be satisfied with a "news-type" class, a class which may include livestock one week, crops the next, farm machinery, etc. However, most classes on production and nearly all classes involving new skills cannot be learned by this method.

Adult farmer class members should pay a fee, whether the school requires it or not. Farmers tend to respond better if they have some money invested. The money can be used to purchase food for lunches after meetings, or may be for a banquet at the end of the course. Any funds left over should be refunded.



Time spent in F.F.A. activities must be budgeted in terms of the total program.

You have briefly examined what I believe is a *TOTAL PROGRAM* of vocational agriculture. You may have more ideas. It must begin with the day-school pupil. The high school boy may choose by his second year if he wants to farm or go into a related agriculture program and be able to get systematic instruction either way. Upon leaving school, he should continue in your program and under your supervision until he is established in farming or some other occupation. Even after he has become established in farming, he should be coming back occasionally to keep up with the latest advancements in agriculture. If you can provide a complete system of instruction, then you compare to a solid platform. Remember, a platform with only two legs is wobbly and you need a keen sense of balance to keep it up. Support your platform with more legs and you'll find it much more stable.

A new instructor might ask, "How can I start such a program? I seem to have my hands full with just a day-school program and an FFA Chapter."

The answer seems to be in another analogy. A professional juggler does not start his act by throwing up all the balls at once. He starts by slowly sending up one ball at a time, adding the others, one at a time, as he progresses. Have you tried this method to achieve a *TOTAL PROGRAM* in vocational agriculture? □

There Is Still Time to Use a Planned Program of Summer Activities

RAY M. McGEE, Teacher of Vocational Agriculture, Jemison, Alabama

A well planned program of work for the summer will provide a basis for an effective on-farm instructional program for high school boys, young farmers and adults.

It is also the time to visit prospective students and their parents, train FFA officers, secure and file new reference materials, revise longtime programs, prepare course calendars, make lesson plans and farm shop plans. The good teacher will also secure needed equipment, supplies, order magazines, and books. In order for a vocational agriculture teacher to perform these and the many other duties of a teacher, it becomes necessary for him to do a good job of planning his summer activities.

The summer program of work should consist of a statement of the teacher's objectives or goals and a detailed list of his daily or weekly activities in order to carry out these goals.

Some of the objectives that a vocational agriculture teacher should include in his summer program of work are:

1. Spend one hour each day at a definite time in the office.
2. Make final arrangements with the boys who are to attend the State FFA Convention. This should be done the week before the convention.
3. Visit high school boys, young farmers and adult farmers.
4. Visit all prospective vocational agriculture students and their parents.
5. Revise the annual and long-time program of work.
6. Revise the course calendar for each class taught.
7. Prepare as many lesson plans for jobs to be taught as possible or as many as one feels necessary for the following year.
8. Revise lesson plans that have been used the previous year; bringing them up to date.
9. Order reference materials for class use and get such materials properly filed.
10. Hold regular FFA Chapter meetings and conduct an officer training school for the new elected officers.
11. Locate and place calves for next year's show.
12. Improve the shop facilities by adding new equipment, building new cabinets, relocating and improving shop areas, etc.
13. Hold as many adult class meetings as needed.
14. Take time for vacation.
15. Include activities for professional improvement.

In planning the summer program of work and activities a few weeks beforehand I am sure there will be many changes. In order to cope with these changes I am thinking that a teacher

should use the above program as merely a guide. I think it would be wise to make out a weekly itinerary listing his daily activities and mail a copy to all concerned and have it in their office on Monday morning of the week involved.

By following the above method of reporting our summer activities, our program of vocational agriculture will be strengthened in the community, county, state and nation. I am of the opinion that all teachers do much more work and good than the average person knows about. □

An Evaluation of the Educational Objectives of Vocational Agriculture by Idaho School Administrators

DALE B. DOUGLAS, Graduate Student, University of Idaho, Moscow.

This investigation was planned (1) to obtain an evaluation of the present educational objectives in vocational agriculture; (2) to determine if in the opinion of Idaho school administrators there is a need for modifying the educational objectives in vocational agriculture; and (3) to present the opinions of Idaho school administrators with regard to the present objectives, as revealed through an opinionnaire study.

The present objectives as listed in Eudcational Objectives in Vocational Agriculture, Monograph 21, United States Department of Education, are as follows: They include the ability to

1. Make a beginning and advance in farming.
2. Produce farm commodities efficiently.
3. Market farm products advantageously.
4. Conserve soil and other natural resources.
5. Manage a farm business.
6. Maintain a favorable environment.
7. Participate in rural leadership activities.

An extensive review was made of the literature related to the educational objectives in vocational agriculture. This survey of literature revealed that of the present seven objectives the first, that of making a beginning and advance in farming, received primary emphasis. The other six objectives are considered by many authorities to be subsidiary to the first objective. The present objectives assume that pupils who enroll in vocational agriculture have made a final decision in their choice of an occupation.

Though few studies have been made dealing specifically with the educational objectives for vocational agriculture, a number of studies have been made concerning the occupational status of former students of vocational agriculture. Practically without exception, these studies reveal that less than half of the students who take vocational agriculture enter farming as an occupation.

The majority of Idaho school administrators returning opinionnaires indicated that in their opinion the educational objectives in vocational agriculture should not emphasize as a major objective the establishment in farming. It was their opinion that the objectives should

1. Emphasize preparation for occupations related to farming.
2. Emphasize occupational guidance.
3. Emphasize and prepare students for college.
4. Emphasize training for those interested in becoming skilled farm laborers.

According to the majority of opinion of Idaho school administrators responding, the educational objectives in vocational agriculture should not

1. Emphasize as a major objective the establishment in farming.
2. Emphasize the training of nonfarm youth for farming or related occupations.
3. Emphasize training for part-time farming.
4. Emphasize training in general or nonvocational agriculture for nonfarm youth.

In their evaluation of the present objectives as compared with suggested alternative objectives, the majority of the respondents chose an alternative objective. The majority choice of ten possible training objectives for vocational agriculture read as follows:

1. Make a beginning and advance in an agricultural vocation.
2. Apply the principles of science, management, economics, and mechanics to the efficient production of farm products.
3. Apply the principles of science, management, economics, and mechanics to the efficient marketing of farm products.
4. Manage and use wisely soil, water and other natural resources.
5. Assist the students in learning how to manage a farm as a business.
6. Aid students in becoming socially adjusted to their environment.
7. Participate effectively in school and community affairs.
8. Appreciate the industry of agriculture, its social and economic importance.
9. Plan and prepare for post high school education in agriculture.
10. Develop through growing plants and animals an understanding of the basic principles of life.

It is evident from the opinions expressed by the school administrators study that they do not favor some of the present training objectives for vocational agriculture. It may be that the present objectives are inadequate in the opinion of the majority, or possibly the administrators do not clearly understand the intent of the present objectives. Obviously, objectives must be discernible by all concerned. They need to be expressed in terms which are clear, concise and meaningful to school administrators as well as to those professionally trained in the field of vocational agriculture.

It is a recognizable fact that the nation's agriculture has undergone profound changes since the present

educational objectives in vocational agriculture were formulated. However, on a national scale, few specific facts have been compiled which can be used as a basis for possible modification of the educational objectives in vocational agriculture. There exists a need for further studies regarding training objectives for vocational agriculture on the state, regional and national level.

Based on the findings of this study, the following recommendations would appear to be appropriate:

1. An organized effort should be made on a national level to study the need for possible modification or revision of the present objectives as listed in Educational Objectives in Vocational Agriculture, Monograph 21, United States Department of Education. Such a study should be carried out by vocational agriculture teachers, state staffs, supervisors and teacher trainers in cooperation with the United States Office of Education.
2. Vocational agriculture should continue to be designed for, but enrollment not limited to, present and prospective farmers. □

The Editorial Policy of the Agricultural Education Magazine

RALPH J. WOODIN—Editor, The Agricultural Education Magazine

Readers as well as contributors to a publication such as THE AGRICULTURAL EDUCATION MAGAZINE occasionally need to review its editorial policies. In order to have an understanding of its purposes, the individuals and groups whom it seeks to serve and the procedures by which it attempts to accomplish its objectives. When these editorial policies are clearly understood, the value of the publication should be enhanced and they may also provide a basis for the continuous evolvement of improved editorial policy.

The first statement of editorial policies of THE AGRICULTURAL EDUCATION MAGAZINE was published in the first issue in January, 1929. Those policies have been revised and restated in terms of changing situations. Many contributors, members of editorial boards, readers and editors have had a part in developing these policies.

The Magazine is indebted to Editor Alfred H. Krebs for preparing a written statement of policy which was accepted by the Editing-Managing Board in 1958. The statements of policy which are given here are derived in part from this statement as well as from other statements which have appeared in the Magazine from time to time. These statements are presented in an abbreviated form in order to provide a short review of general editorial policies of the Magazine.

1. *The purpose of the Magazine:*
   The first editorial of the first issue stated, "A major aim of the publication is to unify the forces of agricultural education in the county". . . . While such unification is still needed, the Magazine has also become a means of exchanging professional news and views, a sounding board for new ideas and a source of reviews of publications and research of our field.
2. *The Clientele to be served:*
   Editor H. M. Hamlin's first editorial in the first issue stated, "The demand is, first of all, for a teacher's magazine written and read largely by men in the field." In addition to this group, the Magazine has come to serve other important groups which include graduate and undergraduate students of agricultural education, teacher educators and supervisors, and upon occasion, school administrators and others interested in agricultural education in the public schools.
3. *The content of the Magazine:*
   The content of the Magazine should be primarily news of the profession including activities of organizations, developments within the program and promising innovations in theory, practice, and evaluation as they relate to the teacher's work, his relationships with other agricultural and educational groups as well as similar news regarding teacher education and supervision. Reports of research related to the program are especially welcome as are articles debating current issues in agricultural education.
4. *Themes for individual issues:*
   The editor will establish themes for each month of each value of the magazine and will publish them in the April issue.
5. *Type of contributions:*
   In addition to articles relating to the theme of each issue, other selections of the Magazine will be devoted to—
   a. Book Reviews—Short reviews of publications of general interest to the profession.
   b. News and Views of the Profession—Short news articles of current happenings, regarding organizations and people.
   c. Tips That Work—Brief "How to do it" articles by teachers.
   d. Stories in Pictures—Captioned pictures which tell a story of current developments in the program.
   e. N.V.A.T.A. Happenings—Activities reported through a column from the desk of the Executive Secretary of the National Vocational Agriculture Teachers Association.
6. *Securing Contributions:*
   The editor is responsible for securing an adequate supply of copy for the magazine and for keeping members of the agricultural education profession informed of his needs. He may solicit articles from persons outside the profession as well as from persons in the profession. Preference in both solicitation and publication will be given members of the agricultural education profession. Solicitation of articles will, for the most part, be handled through the staff of special editors, who in turn, may be assisted by editori-

al representatives in each of the states.

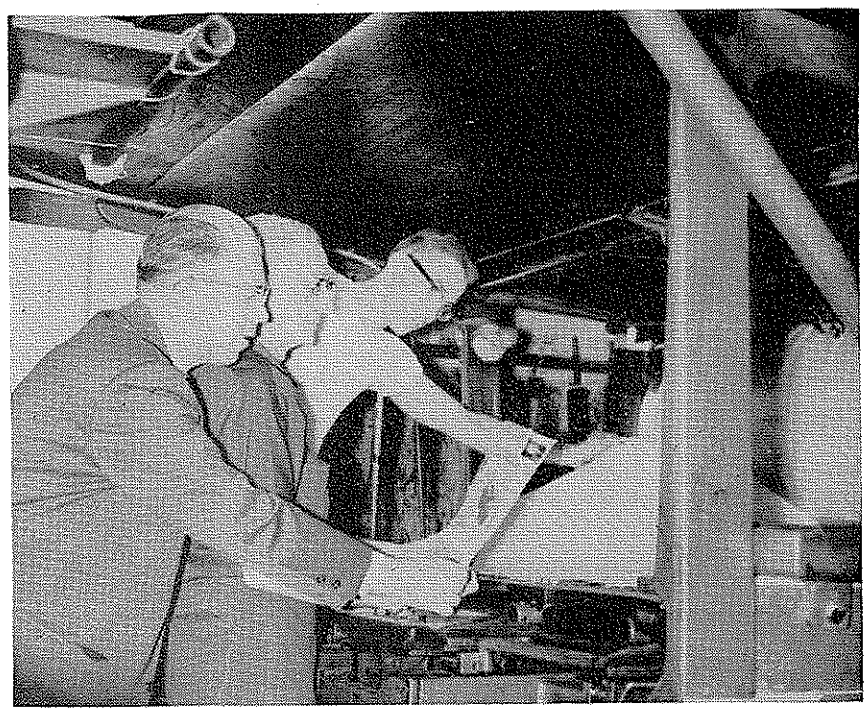
7. *Selection of Articles:*
   Selection of articles for inclusion in any particular issue is left entirely to the discretion of the editor and he is responsible for acknowledgement of articles and for final acceptance or rejection of articles for publication. The editor will request the publisher to send to each author of an article accepted for publication one complimentary copy of the issue in which the article is published.

8. *Reprinting Articles:*
   If a sufficient supply of original copy is on hand, articles already published elsewhere will not be reprinted in the magazine. The editor may make exceptions for articles which he considers to be particularly significant and which are published in sources not generally available to persons in the agricultural education profession.

9. *The Editorial Page:*
   The sources of articles for the editorial page is left to the discretion of the editor. The opportunity to provide pictures for the cover page of the magazine will be rotated among the states. If states fail to provide pictures, the editor is free to substitute other pictures.

10. *The Annual Index:*
    The four middle pages of the August issue of each volume of the magazine will be used for publishing the index of authors and articles for the preceding volume.

11. *Submitting articles:*
    Articles should generally be submitted to the appropriate special editor who will forward them to the editor. All articles must be in the hands of the editor three months prior to the first day of the month of the issue for which the articles is intended.



Another issue of The Agricultural Education Magazine comes off the press of The Interstate Printing Company, Danville, Illinois. Its make up, content, and value are all influenced by its editorial policy.

Suggestions for Writers for the Agricultural Education Magazine

These suggestions to writers, although not policies of the magazines, are for the most part derived from them. They are intended to encourage those who wish to contribute perhaps for the first time and to expedite the publication of these contributions.

1. Write articles which will have interest and value to the readers, a great majority of whom are teachers of vocational agriculture.
2. Avoid a provincial or "one-state" point of view. Remember you are writing for teachers located in each of our 50 states as well as readers in most foreign countries. Your article may be read by a teacher as far north as Alaska, as far south as Florida, as far west as California, and as far east as Maine.
3. Write your article for the Agricultural Education Magazine. Graduate papers, speeches, departmental bulletins, research publications, and articles from state publications should be rewritten in order to be appropriate.
4. Unless you are writing an editorial, keep your own personal opinion in the background, concentrating on *what, when, where, who,* and *why*. Remember that what happened last month has much more news value than what happened last year.
5. Document your ideas. References to research, to books and periodical articles often lend necessary support to your own ideas. Check back issues for the past four or five years to make sure that you are not repeating a previous article.
6. Whenever possible, relate your article to a theme. Themes are announced in the April issue for each coming year.
7. Provide appropriate pictures to illustrate your articles. Pictures should be clear and sharp. 5 x 7 single weight glossy enlargements are preferable to contact prints. Include captions but do not paste or fasten to the picture with paper clips. Use letters A, B, C, etc., on both caption and prints if more than one picture is submitted.
8. Include tables, graphs, and line drawings if appropriate.
9. Keep your articles brief and to the point. Most articles should range from two to six double spaced pages. A three-page article with one illustrative picture, a picture of the writer and headlines will occupy approximately one page, a desirable length.
10. Leave the upper 1/4 of the first page blank, starting with your headline about 3 inches from the top of the page. In the upper right hand corner of the first page, give your name, the date the article was submitted, and the month in which you wish the article to appear.
11. All articles should be typewritten and double spaced. This also applies to titles, footnotes, and photo captions. □

Some New Approaches for Meeting Today's Needs in Vocational Agriculture

CLAXTON R. COOK, Teacher Education, Oklahoma State University

Vocational agriculture is being vigorously criticized as to its value as an educational asset in our public schools. This is due, in part, to the close relationship that vocational agriculture has with the image American people have developed toward the farmer. There is just enough truth in part of the criticism to feel the smart and sting of the accusations.

Vocational agriculture has the responsibilty to our society to remain a dynamic educational force in the public schools system. The highly motivational qualities that are inherent within the educational process when studying mother nature's simple, yet complex laws, are of such a "natural" that comprehensible concepts are readily acquired. Understandings with meaning bring such feeling of worth and appreciation to the individual that he recognizes his value to our society. This creates an environment that places a premium on creativity so transfer of learning is greatly enhanced.

This vital educational program must not be rejected by those who are charged with the responsibility to keep it alive, in spite of temporary criticism and personal sacrifices. A disheartening factor is that many of our better teachers recognize the severity and effectiveness of the present criticisms and are left frustrated as more lucrative opportunities for employment are being offered. Yet many will stay with the program as they recognize the valuable contribution they are making to individuals and the society.

The objectives which have guided vocational agriculture must be recognized for their true worth, and new goals must be established which will more nearly bring vocational agriculture into its proper perspective. A philosophy based on the assumptions that vocational agriculture should provide for the agricultural educational needs of the total community would bring a wider scope with unlimited possibilities. Vocational agriculture must forsee an expansion of her potentialities if she is to lend an impact worthy of her heritage. The traditional philosophy of adhering to the needs of the people we serve must remain basic. Consideration of who we should serve is a major concern that will have a bearing on our potentialities for service.

When we recognize the heterogeneity of our society, we value our responsibility to the total populace. All deserve our attention in interpreting the role of agriculture in our modern world. This is obvious when we see the misinformed public trying to exchange an abundance of food for something they know not what.

In this area we have severely failed our times. We, who have in our grasp a forceful media for welding public opinion to face reality, have fought defensively when we should be praising the blessings of our present plight and take an offensive stand with pride in providing abundance.

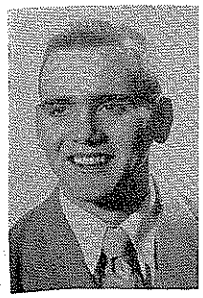
The interpretation of the role of agriculture to the man on the street has not been a major concern of our profession. Ideas that he acquires have derived largely unaffected by our influence. The teacher who attends agricultural conventions, and reads widely on pertinent agriculture problems is in a position to understand various political, social, and economic factors. Sharing these ideas and experiences in a manner that brings out the ideals and desires of others provides for understanding and appreciation.

Agri-Business has been neglected by many while others have courageously faced up to our changing times and grappled with this pressing problem. They have found that "bricks will come out of the wall" without pulling the wall down around them. Others, who are less equipped to care for this problem, will take up this responsibility if we do not.

Farm management presently overshadows all other problems in farming. Many times we exhibit small concern for the educational needs in this area supposing that others will fulfill the need. Commercial concerns are making an effort to supply these needs but are not able to meet the individual demands as a knowledge of the major factors in management are based on actual findings in the local community. Local patrons appreciate those who expend effort in acquiring information that has exactness and can be used in solutions to farm management problems. Local surveys followed up with evening sessions in which the findings are shared with the participants can be utilized effectively.

Inherent within vocational agriculture is the opportunity to provide an environment which is conducive to creative thinking and to development of a well-rounded personality that has acquired self-discipline and mastery of many areas of learning. The natural challenge of using various subjects such as English, mathematics, science, and other academic areas to solve problems is provided for in vocational agriculture. This "natural" affords an opportunity for the "whole" student to develop in line with his aspirations. This development brings together various component parts, as the individual sees himself in proper perspective with the universe. His personality, also, has opportunity to become so integrated that life has a definite purpose, and challenging goals are more likely to be formulated bringing compensating rewards. We have been challenged in being lax in this area as many times we do not demand an excellency in performance from our students relative to English and other areas of subject matter. Our accusers are probably right in many instances.

Many schools could profitably use a school farm. This should be a large unit that utilizes a full time man other than the vocational agriculture teacher in performing the labor. Provision should be made so that all the school feel that this is their farm, and field trips should be taken by other classes where they conduct experiments under the supervision of the vocational agriculture department. □



The Use of Job Operation Sheets in Agricultural Mechanics Instruction

WM. H. ANNIS, Teacher Education, Cornell University
Annis was formerly a Vo-Ag Instructor at Silver Lake, N. H.

The following example of a Job Operation Sheet illustrates the format used by the Instructional Materials Service at Cornell. This format consists of the area of agricultural mechanics and the identification number of the job; the title of the job; tools and materials needed; procedure—which is itemized step by step to accomplish the job; safety precautions; supplemental information—designed primarily for the teacher's use to reaffirm or re-establish information which otherwise might have been forgotten; and references—only the references used in developing the Job Operation Sheet are cited to alleviate the necessity for the teacher to check several references should he wish to check a point.

Job Operation Sheet
Farm Power and Machinery
Job A-7

Title: Servicing Batteries
Tools and Materials Needed:

1. Stiff bristle brush (not wire).
2. One quart of household ammonia or a one quart solution of ¼ lb. of soda to one quart of water.
3. One gallon of tap water.
4. Battery hydrometer with thermometer.
5. One quart of distilled water or clean rain water.
6. Syringe (bulb type) or a small pitcher.
7. Battery terminal and connector brush.
8. Wrenches to fit connector bolts.
9. Vaseline or other non-metalic grease.

Procedure:

If a thorough cleaning is to be performed, the battery should be removed from the case and both the battery and case should be cleaned. For regular servicing, proceed as follows:

1. Remove the battery case cover if necessary to work on the battery.
2. Brush the corrosion and debris from the battery with the stiff bristle brush.
3. Wipe the corrosion from the terminals with a cloth dampened with ammonia or a baking soda solution. (¼ lb. soda: 1 qt. water).
4. Wash the battery with tap water to flush away corroded material.
5. Remove filler caps from the battery cells.
6. Check the specific gravity of the electrolyte with the hydrometer.
7. Use the syringe to fill each cell to the recommended level (found on the battery) with distilled water.
8. Check the vent hole(s) in the filler caps for obstructions, clean if necessary, and replace the filler cap.
9. Check for loose terminal connections. If terminal (s) is loose, use the following procedures:
   (a) Remove the terminal lead.
   (b) Clean both the terminal lead and terminal with the terminal and connector brush.
   (c) Replace the terminal lead and tighten the connector to the terminal.
10. Apply a light coat of vaseline to the terminals and connectors to prevent corrosion.
11. Replace the battery case cover.

Safety Precautions:

1. Electric storage batteries give off highly inflammable hydrogen gas when charging and continue to do so for some time after receiving a steady charge.
2. Do not allow an electric spark or open flame near the battery—this may cause the battery to explode.
3. Avoid spilling any electrolyte on hands or clothing—apply ammonia or baking soda immediately if this occurs.
4. Always use a carrying strap when moving a battery to avoid acid burns to hands and clothing.

Supplemental Information

1. The battery should be serviced every 150 hours of tractor operation or every 30 days, whichever comes sooner.
2. The hydrometer reading should be adjusted by adding or subtracting .004 to the reading for every 10°F the electrolyte is above or below 80°F.

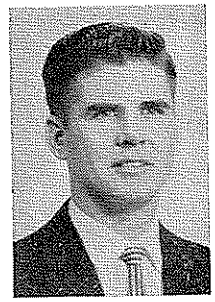
Charge Chart

State of Charge	Specific Gravity	Freezing Point
Full Charge	1.285	−96°F
Good	1.255	−60°F
Half Charge	1.225	−35°F
Danger Low	1.185	+ 8°F
Very Low	1.150	+ 5°F
Full Discharge	1.120	+14°F

3. Other tests of battery strength include the Voltmeter shunt test which tests the voltage of each cell while a heavy current is flowing; and the starting motor test which determines if the battery is in good enough condition to start the engine.

These Job Operation Sheets serve a dual purpose. They may be used by either the teacher or pupil. It is expected that normally the teacher would utilize this material as a guide in performing demonstrations, then the pupils could use it as a guide in performing the job either in the school shop under the supervision of the teacher or in the case of the simpler jobs on the home farm without supervision. The pupil would, over the period of his four years of vo-ag, build up a rather complete file of these Job Operation Sheets which would be a handy reference as he becomes established in farming, works in a nonfarm agricultural occupation or pursues his education in an agricultural college. □

Hammer and Nails or Pistons and Plugs ? ?



J. D. McCOMAS, Teacher Education, New Mexico State University, University Park

Over 7 billion dollars! That's the increase for all farm machinery and equipment in the U.S. during the last 20 year period. In 1940, farm tractors and other machinery were valued at 4.4 billion dollars. This amount increased to 11.6 billion dollars by 1959.[1]

We in vocational agriculture might critically ponder whether sufficient alterations and innovations have taken place in individual school farm mechanics programs to complement these advances. It is evident that such advances call for dynamic and changing programs of instruction in farm mechanics.

How Much Time Should Be Used for Farm Mechanics?

This is an aspect of vocational agriculture that has been a "bone of contention" among teachers, supervisors, and teacher trainers since the program's inception.

Recently an Ohio committee, composed of supervisors, teacher trainers, and teachers, concurred that approximately 38 percent of the total program of instruction would be a desirable amount to spend for farm mechanics instruction. This would be about 267 days of a total four year program of instruction.

A recent study[2] by the writer, involving some 114 Ohio teachers of vocational agriculture, revealed that this group averaged near the recommended time for farm mechanics instruction. *However, a closer examination of data submitted by teachers revealed that individual school farm mechanics programs utilized from 25 to 64 percent of the total program of instruction!* One might seriously question whether the needs of boys in one school, differ so greatly from those of boys in another as to justify 39 percent difference.

What Should Be Taught?

As noted earlier, most teachers included in the study cited, were spending the time recommended for farm mechanics. However, considerable deviation existed in the amount of time devoted to various areas of instruction in farm mechanics. These variations are indicated in Table 1.

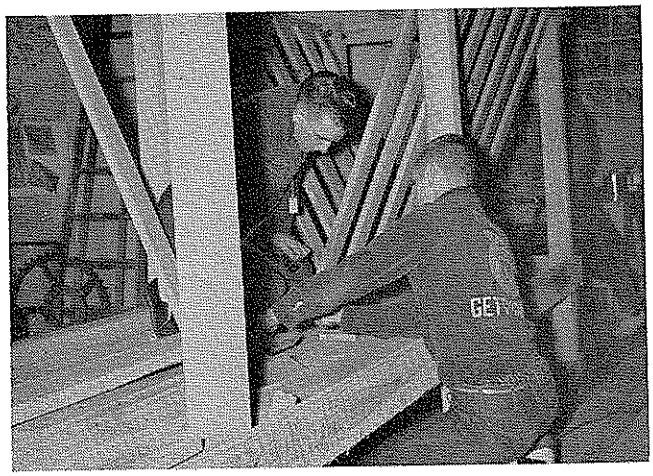
[1] *Power to Produce*, U.S.D.A. Yearbook of Agriculture, 1960—p. 8.

[2] "The Relationship of Construction Projects to the Farm Mechanics Program of Vocational Agriculture in Ohio," unpublished Master's Thesis, The Ohio State University, 1960.

Table 1. Average number of days 114 Ohio teachers reported taught in farm mechanics as compared to recommendations

Farm mechanics area	Total days reported by teachers	Recommended number of days	Difference in days
Farm power & machinery	71.6	92	— 20.4
Farm bldgs. & conveniences	26.5	29	— 2.5
Soil & water management	25.8	20	+ 5.8
Electricity	21.1	18	+ 3.1
Farm shop	120.3	108	+ 12.3
Other (unclassified)	2.3	0	+ 2.3
TOTALS	267.6	267	.....

These data indicate that teachers spent four weeks less in farm power and machinery instruction than was suggested for this purpose. It may be noted in the table that teachers spent two and one-half weeks more than was recommended for the area of farm shop.



Is too much time being spent in farm mechanics programs on such projects as this? A recent Ohio study revealed that teachers were spending as much time with this type project as in farm power and machinery.

Is today's organized instruction in farm power and machinery sufficient to meet the needs of tomorrow's agriculture?

Teachers were asked to report the amount of time in the farm shop area of instruction that was being used for carpentry and metal work. These reports showed a total of 75 days was devoted to carpentry and 47 days was used in teaching metal work.

It can be seen that the time devoted to carpentry alone exceeded the total instruction for farm power and machinery. It is also noted that carpentry and metal work combined accounted for 45 percent of all time use in farm mechanics instruction.

What Is The Answer?

It is unwise to assume that the answer to this question rests entirely upon the amount of time devoted to instruction in programs of farm mechanics. *What* is taught within farm mechanics areas, and *how* it is taught, is equally important.

The issue is one which cannot be resolved by deciding whether farm mechanics programs shall be one of hammer and nails, or pistons and plugs. Enough of each of these and other aspects of farm mechanics must be taught to provide a desirable balance of learning experiences that can satisfy the present and future needs of our students. □

Some Dangers to the Program of Vocational Agriculture

DALE BROWN, Teacher of Vocational Agriculture, Mexia, Texas

Vocational agricultural education has earned a host of friends. Those who have sought to destroy the program have met with little success. Direct attacks aimed at the abolition of the program through legislative action have not been effective. The greatest danger to vocational agricultural education is the insidious encroachment of operative regulations which could destroy the foundations upon which the program is based. Those of us in agricultural education should recognize the fact that we can be nibbled to death by our "friends." And this is how it can be done:

1. Establish an excessively high number of required courses. Then there will not be enough elective courses to permit a student to complete a course of instruction in vocational agriculture.

2. Establish a school guidance program with the philosophy that vocational agriculture is for the mentally retarded and delinquents. Then the vo-ag department becomes a dumping ground where a quality program is impossible.

3. Adopt a schedule with such short class periods that field work and shop work will not be feasible. Then the community will no longer be the classroom for vocational agriculture and in the restricted confines of the four walls of a schoolroom vo-ag will suffocate and degenerate into general agriculture.

4. Eliminate special training and certification for vocational agriculture teachers. Then incompetent instruction will abound in this profession which requires special training and which should have identifiable certification. The results would be disastrous.

5. Do away with expense allowances for developing vocational agriculture programs. Then the cost of travel and other expenses incurred in developing supervised farming activities, Future Farmer activities, and community agricultural improvement programs would have to be borne by the teacher's already burdened salary. Supervision would diminish and vo-ag programs would die.

6. Put the vo-ag teacher on a 9 month program and assign him other classes to teach. Then he would have very little time to plan and promote supervised farming activities, Future Farmer activities, and community agricultural improvement projects. These distinctive features of vocational agriculture programs do not occur by spontaneous generation.

7. Eliminate the supervision above the local level. Then many desirable activities in operation on a district, area, state and national level would become ineffective. In-service-training for vo-ag teachers, Future Farmer leadership training activities, FFA contests and other valuable programs would wilt and die without supervision above the local level. And the local program would be far less effective without them.

8. Use the vo-ag classes as a labor battalion and the teacher as an all purpose flunkey in the school and community. Then an organized course of instruction can not be offered. The educational intent of the program can not be realized. The boys and the citizens of the community will lose respect for the program.

9. Tolerate poor instruction. Then vocational agriculture will get a "black-eye," for the program will be dragged down toward the level of the instructor. The best public relations is a good local program. Good local program are not developed by poor quality vo-ag teachers.

10. Reduce standards for vocational agriculture and fail to enforce them. Then we will begin moving toward oblivion rather than excellence. When these things have been done call the funeral director for vocational agricultural education will need to be placed in a coffin. □

TIPS THAT WORK

How to Use A Chapter Farm

Norman Robinson,
Teacher of Vocational Agriculture,
Knoxville, Iowa

Several questions are commonly asked about chapter farms. Should we have one? How do we acquire one? What seems to be the best size? How should a chapter farm be managed and operated?

Size

Ten to thirty acres has been given as an optimum size for a chapter farm. With less than ten acres the plot loses some of its practical appli-

Tips that Work . . .

cation and becomes simply a series of small experiments. Over thirty acres involves too much time, time that could more profitably be spent elsewhere if we are to assume it is desirable for the vo-ag instructor to be present while machinery is being used by his chapter members.

Securing Machinery

Rental arrangements may need to be made for the use of machinery the first year or so and sometimes local machinery dealers are willing to cooperate. Sometimes chapter members will be willing to bring machinery from home and use it at the local custom rate. However, asking chapter members to bring machinery can remove one of the real advantages of the farm, the opportunity for students to perform farming operations, that they aren't permitted to do at home. Another factor is the timeliness of an operation. When a job needs doing at the chapter farm, rental machinery from a local machinery dealer or from a member's farm is usually being used. In conclusion to the machinery question, owning most of the items seems to be the best answer as it provides opportunity for operating experience for those who can't get this experience at home. It also makes the machine available when a job should be done and used machinery can provide experience in purchasing, care and repair.

Labor and Management

Labor will normally not present a problem except on jobs, such as haymaking, that require considerable labor during summer months. Seedbed preparation and planting can be handled during the school year. Students can perform these operations during study hall periods and after school. Except at special times, students working at the farm during their vo-ag classtime is not desirable.

Managing the farm calls for cooperative effort on the part of FFA members. The supervised farming committee of the chapter's program of work should be held responsible unless a senior student is elected manager. The vocational agriculture farm management students should make decisions pertaining to the farm.

Benefits to Expect

The financial benefits of a chapter farm can have considerable appeal for chapter members, their instructor and the community. Money with which to carry on chapter activities can be provided without selling campaigns that tend to cause the local people to hesitate to open the door for an FFA jacket. In addition to the educational benefits derived directly from operating the farm, money is available to carry on more of such things as community service work, recreational activities and public relations programs. □

Securing Maximum Results From Fertility Plots

John Thell,
Teacher of Vocational Agriculture,
Parkers Prairie, Minnesota

Do you have a plot of land available for your use near the high school and along a highway used by farmers as they drive to town? If you do, this land can be a boost for your summer program as well as a valuable teaching aid in your high school program.

We were fortunate in having land available from a tract purchased by the high school for a proposed high school athletic field. We are using an acre per year for a "FFA Corn Fertilizer Plot." Each year the sophomore class lays out four quarter-acre strips. We plotted four quarter-acre strips and fertilized each strip individually. Using a 5-20-20 starter fertilizer we applied it at the rate of 120 pounds per acre on one strip, 80 pounds per acre on the second strip, 40 pounds per acre on the third strip, and no fertilizer on the final acre strip.

The boys constructed a FFA Corn Plot sign in the farm shop class to help publicize the plot.

The corn was donated by one of our local seed corn dealers and the fertilizer by the local elevator. The local chapter rented the equipment needed to prepare, seed, and care for the corn plot from a local farmer. All labor, including the hand picking, was donated by the FFA boys.

I released news articles from time to time in our local newspaper relating to the plot. This helped create and hold interest regarding the project.

In fall the junior class completed a yield check to determine the difference in yield among the four quarter-acre strips. The corn was sold to the local elevator and the profits deposited in the chapter's treasury.

We now have a group of farmers cooperating in an adult soil-fertilizer management class who are taking soil samples and having them analyzed. This fall we will complete the course with a study of soil and fertilizer and plan a complete fertilizer program for each cooperator. This class, I believe is partially a result of the demonstration plot.

This teacher believes this project has:

1. Developed an interest in the use of commercial fertilizer.
2. Answered many questions farmers had about commercial fertilizers.
3. Stimulated an interest in our summer Vo-Ag program.
4. Made an excellent and practical soil-fertilizer problem for my high school classes. □

Farm-City Week Tour

Paul M. Day,
Teacher of Vocational Agriculture
Faribault, Minnesota

In observance of National Farm-City Week, November 17-21, members of the Faribault Chapter, Future Farmers of America conducted their first annual farm tour. Since the student body is approximately 60% urban, it was felt that a tour of several farms would promote a better understanding of the farm business and a greater appreciation for rural living, and in addition, create a better understanding between the rural and urban citizens.

On Tuesday, November 21, city students and faculty members, including the principal, assistant principal, guidance counselor, and athletic director, left school at 6:15 a.m. and visited eight farms in the school area. The hosts explained the farm business operations and the guests had an opportunity to see Future Farmer members doing the morning chores. The guests were served a bountiful breakfast by the farm families before returning to classes at 8:30 a.m.

The students, faculty and farm families were highly enthusiastic about the tour. Many had never been on a farm before and had no idea of the farm families' scope or complicity of operations. The program has aided immeasurably in improving the relationship between the rural and urban students and future tours of this type are planned for next year. □

News and Views of the Profession

New Special Editors Named

Beginning with the July issue, six new special editors assume their duties. They bring to the Magazine a wide variety of professional interests, experiences, and abilities. A brief autobiography of each of these men is given in order that future contributors may make better use of their services.

The magazine also wishes to express its thanks to the following special editors, who are retiring from these duties this year, for their many valuable contributions. This group includes R. J. Agan, Kansas; Joe P. Bail, New York; S. S. Richardson, Utah; J. C. Atherton, Arkansas; and Carl Lamar, Kentucky. □

RAYMOND M. CLARK

Book Review Editor

Dr. Raymond Clark has served as teacher of vocational agriculture, as a supervising teacher in vocational agriculture, state supervisor of agricultural education and resident teacher trainer in agricultural education. At the present time he is engaged in the preparation and distribution of instructional materials for teachers of agriculture in Michigan. Other duties include conducting noncredit in-service program for teachers of agriculture in Michigan, teaching graduate courses in agricultural education and in audio-visual education, and conducting research dealing with agricultural occupations.

Many articles by Clark have appeared in AGRICULTURAL EDUCATION MAGAZINE, and he has prepared several bulletins and source units for use of teachers in his state. His latest contribution is, "Forest Trees of the Lake States."

Clark received his Bachelor's Degree in 1922, his Master's Degree in 1932 and his Doctor of Education Degree in 1950 all from Michigan State University. □

BYRLE KILLIAN

Special Editor for the Southern Region

Born at Olustee, Oklahoma, Mr. Killian graduated from Olustee High School in 1932 and received his Bachelor's and Master's Degrees from Oklahoma State University. He began teaching vocational agriculture in 1936 and joined the State Staff of Vocational Agriculture in 1941 as State Supervisor in charge of Rural War Production Training. He was assigned to the regular staff in 1943, was named Assistant State FFA Advisor in 1948 and Assistant State Supervisor in 1958.

Killian has served on the National Livestock Judging Contest Committee during the past twenty years and has served a three-year term as superintendent of this event. He has served on the Board of Directors and as President of the Southern Regional Agricultural Association in 1959-60. He has served as a member of the Board of Trustees of the Oklahoma Adult Education Association and served as its president in 1960. □

M. G. McCREIGHT

Special Editor for the Central Region

Mr. McCreight was reared on a farm in Southern Nebraska and graduated with a Bachelor's Degree from Peru State Teachers College in 1935. He received a Bachelor of Science Degree in 1938 and a Master of Science Degree in 1951 from the University of Nebraska. He has since taken graduate work at Iowa and Illinois. He taught vocational agriculture for eight years, served as instructor in agricultural engineering for five years and has been in the Department of Vocational Education for the past 11 years.

Other responsibilities in addition to teacher education include directing Vo-Ag Judging Contests, organizing and conducting farm mechanics workshops and preparing teaching aids. He served on the Teacher Education Committee, Agriculture Division of A.V.A. from 1959 to 1961. □

JOHN COSTER

Special Editor for the Central Region

Research design and curriculum planning are the special interests of Dr. John K. Coster, Associate Pro-

fessor of Agricultural Education, Purdue University. Dr. Coster was graduated from Purdue, and has been a graduate student at Purdue and Yale Universities and the University of Colorado. His advanced degrees are from Yale. A former teacher of vocational agriculture in Indiana, Dr. Coster joined the Purdue staff as an instructor in 1949, and was assigned to field service work. Currently his assignments include research, teaching, serving as major advisor for candidates for master's and doctor's degrees, supervising student teaching, and performing field service work. Recently Dr. Coster co-directed a research project in vocational education which was financed in part with a contract with the Cooperative Research Division of the U.S. Office of Education. □

GENE M. LOVE

Special Editor for the Atlantic Region

Gene M. Love is an Assistant Professor and Subject Matter Specialist in the Department of Agricultural Education, Pennsylvania State University.

Love was born and reared on a dairy farm in Erwin, Tennessee. After his parents moved to Pennsylvania, he graduated from Cochranville High School. In 1949 he received his Bachelor's Degree in Agricultural Education and began teaching vocational agriculture at the East Donegal Township High School. After three years there he accepted a Research Fellowship at Penn State and in 1953 and 1954 he received his Master's and Doctor of Philosophy Degrees, respectively.

After his release from the Air Force, he served as a Visiting Professor at the Central Luzon Agricultural College in the Philippines for two years.

In 1958, Dr. Love was appointed to his present position. He teaches off-campus classes for vocational agriculture teachers and is responsible for the preparation of technical agriculture subject matter. □

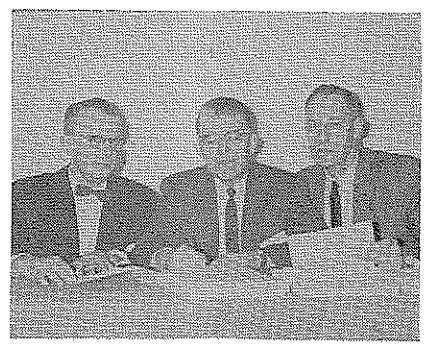
O. E. THOMPSON

Special Editor for the Pacific Region

Orville E. Thompson was born at Union, Montana and grew up on a wheat farm in Dawson County. He attended a rural one room elementary school and graduated from Dawson County High School in 1937. In 1940 he received an elementary teaching credential from Eastern Montana State Normal School.

After four years in the U. S. Navy he enrolled at Montana State College where he was qualified to teach vocational agriculture in 1948. After teaching for three years at Glasgow, Montana he enrolled at the University of California, Davis and received a Master of Education degree in 1952. Later he entered Cornell University where he served as a graduate assistant and later as an instructor while completing requirements for the Ph.D. In 1954 he joined the staff in Agricultural Education at Davis, California. In 1956-57 he was on leave from this position to conduct a state-wide study of vocational agriculture for the California State Department of Education.

His work at the University of California has been in teacher education and research. His research has served as the basis for several bulletins and a number of journal articles. □



Planning for a new monthly column of N.V.A.T.A. happenings are L to R James Wall, Executive Secretary; Ralph J. Woodin; and James Hamilton, N.V.A.T.A. President.

N.V.A.T.A. News

from

James Wall
Executive Secretary

NVATA members will be glad to learn that the 1962-63 split-year diaries will again be provided by The d-Con Company. Distribution of the diaries will be made by your state association. Most associations plan to distribute the diaries at their state conferences as dues are paid.

Jim Hamilton, NVATA president, has called the annual mid-year executive committee meeting for July 5-7 to avoid as many conflicts as possible with state conferences. The meeting will be held at the Morrison Hotel in Chicago.

NVATA was represented at all four of the regional conferences called by the U. S. Department of Education for state supervisors and teacher trainers. Representatives were: Wenroy Smith —North Atlantic Region, Floyd Johnson—Southern Region, James Hamilton—Central Region and James Wall —Pacific Region.

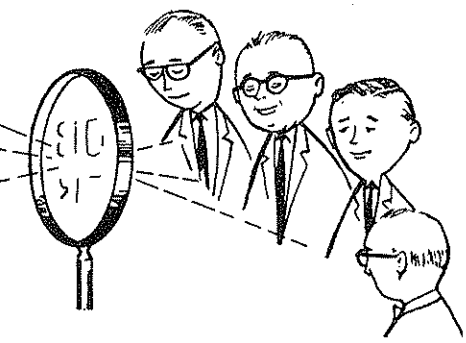
Plans are being finalized for a meeting of vocational educators attending the NEA Convention in Denver. The date is July 4. An NVATA representative will appear on the program.

All NVATA members recently received information regarding an accidental death and dismemberment group insurance program which has the approval of the organization. This is the newest of many services being provided by your NVATA.

The NVATA does not believe it to be fitting and proper for commercial concerns to capitalize on the terms FFA and VO-AG. It would be desirable for affiliated associations to check with their state supervisor and then discuss such matters at their state conference. Members are encouraged to check with their state supervisors before engaging in any sales promotion plan involving the use of the terms FFA and VO-AG. □

Walter Bomeli, Vice-President of Region IV of Bangor, Michigan, says that plans are completed for a regional meeting of state officers at the Ohio F.F.A. Camp on Leesville Lake, June 24-26. □

BOOK REVIEWS



SOILS: SOIL MANAGEMENT FOR CONSERVATION AND PRODUCTION by R. L. Cook, published by John Wiley and Sons, Inc., New York, 527 pp., illustrated. 1962. Price $9.95.

This new book on the management of soils gives major emphasis to principles and practice of soil management as related to conservation and production. It is written, for the most part, in simple language that should be helpful to the reader who wants answers for an intelligent, practical and profitable use of land. However, some chapters such as "Fitting Crops to the Soils" are very technical and others are descriptive in nature.

Of the 24 chapters in the book, the first 13 chapters deal with the basic principles and practices of soil management as they relate to soil conservation and production. Six chapters deal with soil management problems in six climatic areas of the United States—the North Central, Southern, Southwest, Great Plains, Florida and adjoining flatwoods, and the Northeastern States. These chapters, because of their general nature, provide little practical help to workers in any of the areas. The last five chapters deal with the management of particular types of soils such as organic, garden, greenhouse, turf and forest soils.

The book is designed primarily for college students who have taken an introductory course in soil science. However, it should be a source of valuable information for progressive farmers, agricultural extension workers, teachers of vocational agriculture and soil conservationists. It should be a good reference for advanced students in vocational agriculture, but is not suitable as a general reference for high-school students.

Dr. Cook is Professor and Head of the Department of Soil Science at Michigan State University.

William R. Bingham
Teacher Trainer
University of Kentucky

JUDGING LIVESTOCK, DAIRY CATTLE, POULTRY, AND CROPS by H. G. Youtz and A. C. Carlson published by Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 195 pp., illustrated. 1962. Price $3.78.

This new book represents a basic and practical guide for anyone interested in learning to judge livestock, poultry, and crops. The material has been organized in such a manner as to enable the beginning student judge to be precise and definite in rendering correct decisions. Included is both elementary and advanced information essential to assisting students at all levels in becoming accomplished judges.

The presentation of livestock, poultry, and crop characteristics and the sample ratings should be of immeasurable assistance to agricultural students. The highly specialized vocabulary of judging is incorporated in such a way that it may become familiar to students. A variety of words are suggested to express degrees of differences within various classes.

The book is divided into four parts. These include livestock judging—beef cattle, sheep, and swine; judging dairy cattle; judging poultry and poultry products; and crops judging. Each part consists of several chapters devoted to such items as breed characteristics, understanding the score card, terms used in giving oral reasons, sample classes, and reasons for placing sample classes. Special emphasis is placed on giving precise reasons for placings. The book is well illustrated with photographs.

Mr. Youtz is a farmer and a rancher, and also a former vocational agriculture instructor of Lander, Wyoming. Mr. Carlson is an instructor of vocational agriculture of Freemont County Vocational High School, Lander, Wyoming.

Denver B. Hutson
Professor
Agricultural Education
University of Arkansas

AUDIO-VISUAL MATERIALS: THEIR NATURE AND USE by W. A. Wittich and F. S. Shuller, Third Edition, published by Harper and Brothers, 49 East 33d Street, New York 16, New York. pp. xxvi plus 500. Illustrated. 1962.

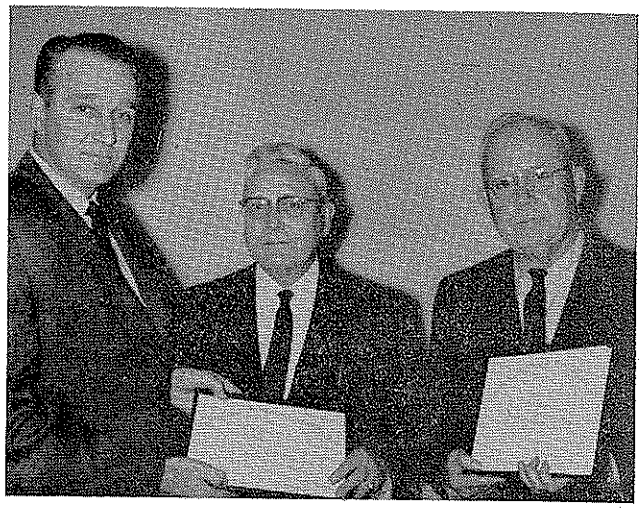
This third edition retains the best materials of their earlier editions and brings these materials and information up-to-date. In the rapidly changing educational scene, it is essential that instruction be both excellent and efficient. The authors have attempted to provide assistance in these respects through the materials they have presented in their book. They have included information about recent developments in the audio-visual field, such as television instruction, the language laboratory, and automated learning materials. They have also described and listed many new developments regarding projected learning materials, study displays, listening techniques, and sound motion picture film improvements.

One of the unique features of this book is the fact that the authors not only describe the materials, but also suggest methods and plans for efficient utilization of these media in the classroom situation. While it is not possible to make specific applications in every field of education, the text does offer suggestions which can be used by teachers in specialized fields, such as vocational agriculture, to make adaptations and put the suggestions to practical use.

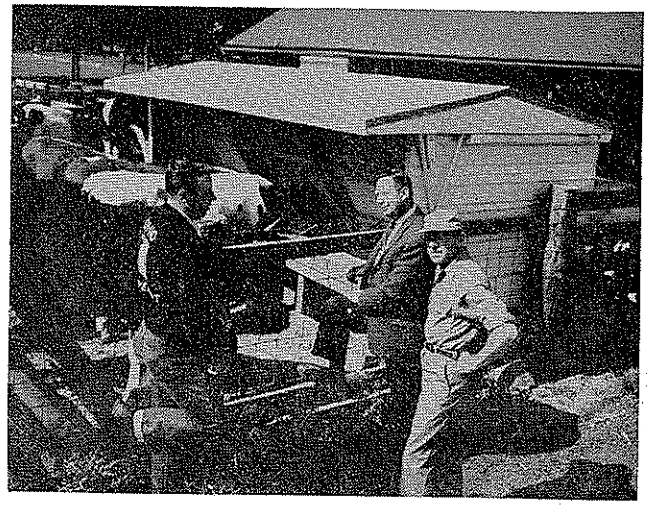
The book is particularly well adapted to use in graduate and undergraduate courses in teacher education dealing with the subject of audio-visual materials. It should also be a valuable reference for teachers in service as a contribution to their professional library and as a reference for use by the teachers in the development and further improvement of the audio-visual aspects of their instructional program.

Raymond M. Clark

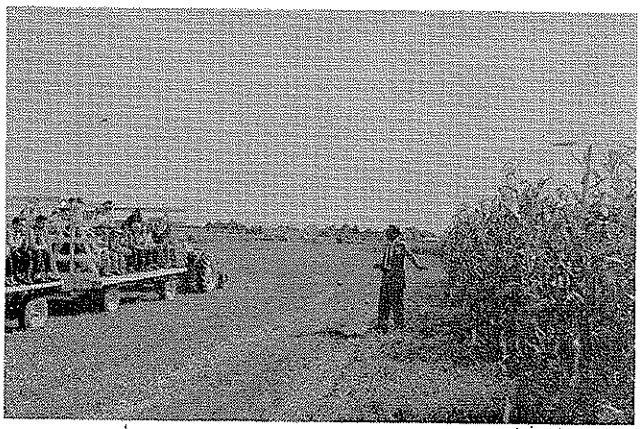
Stories In Pictures



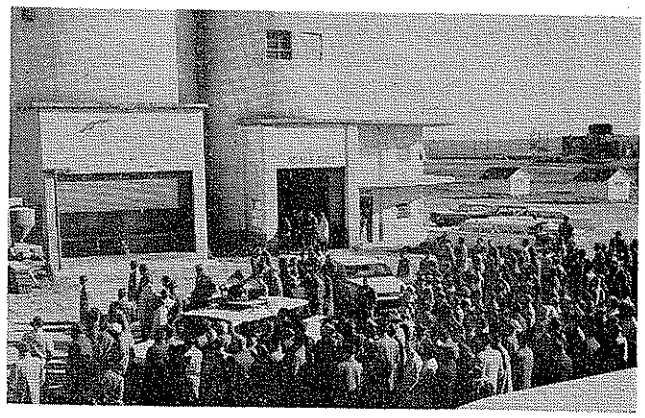
Harold Duis, Program Specialist, U. S. Office of Education, presents certificates to Assistant Supervisors, L. D. Clements of Nebraska and E. O. Bolender of Ohio, recognizing their retirement this year. This occasion took place at the Central Regional Conference in Chicago, March 14.



F. D. Miller (center), teacher of vocational agriculture at Groveport, Ohio, looks over a lot of Holstein steers being fed out by one of his students in partnership with his father. Such cattle make more money for some feeders than the more expensive grades Miller says.



Dr. H. J. Mederski of the Ohio Agricultural Experiment Station explains a bulk fertilizer plot to Ohio teachers visiting the station for a special vocational agriculture day. This year, special days for teachers were held at each of four regional experiment farms.



The farm tour of the Agriculture Section of the American Vocational Association has been an important feature of these conventions for many years. Last year, the tour in the Kansas City area featured beautiful weather as well as an interesting series of visits to spots of high agricultural interest.