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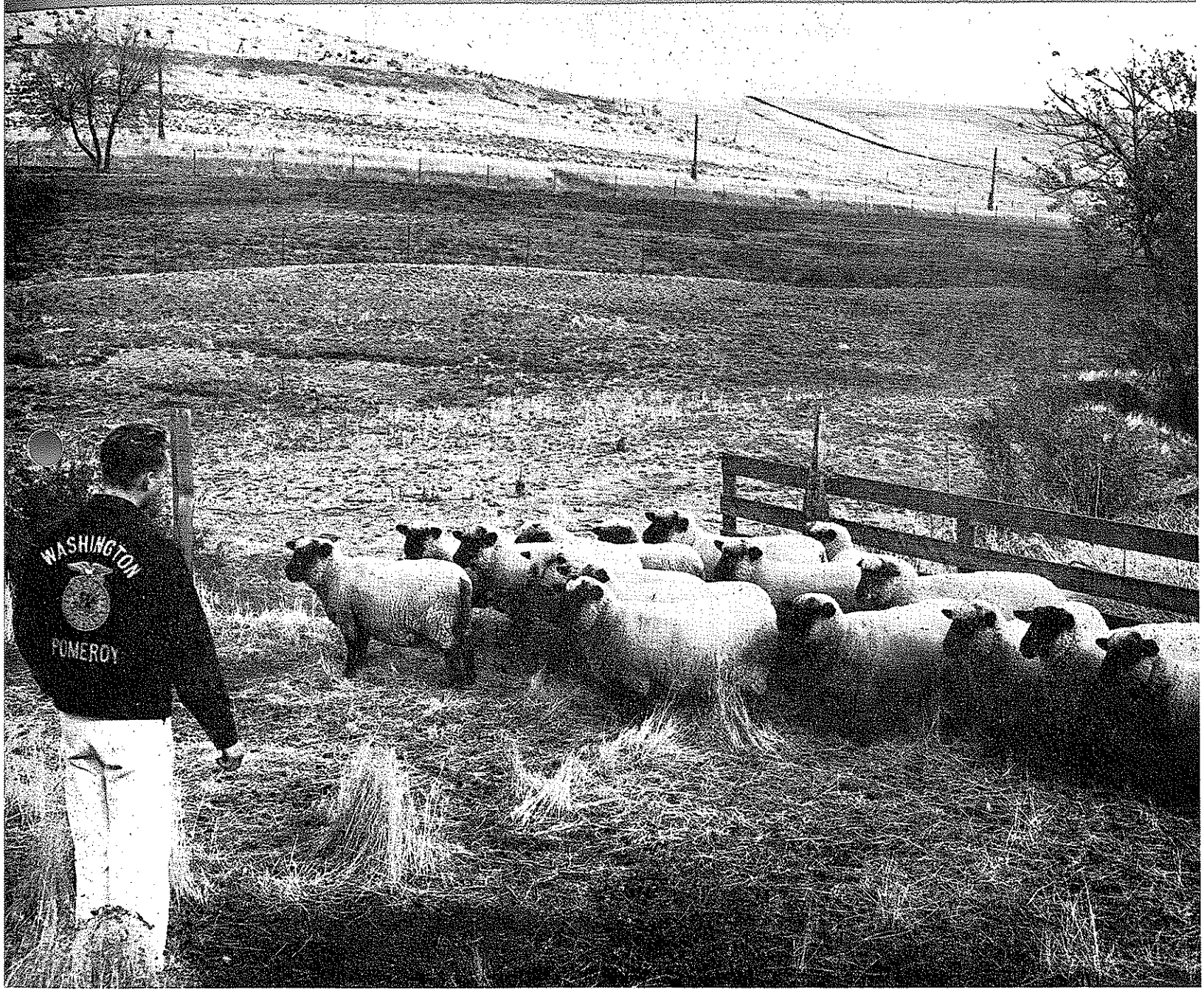
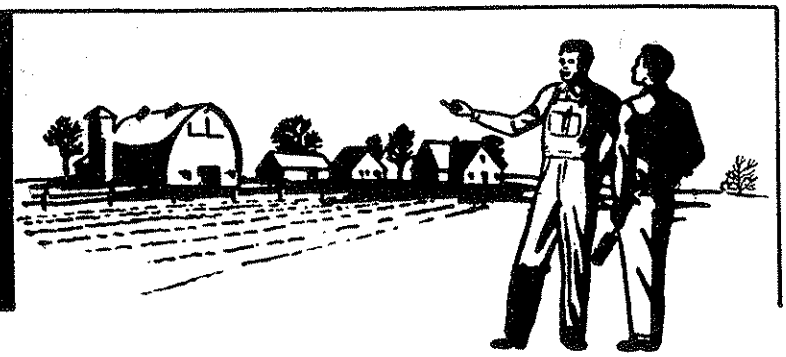


Picture legend, page 180

Featuring— **Administering the Program of Vocational Agriculture**

The Agricultural Education Magazine



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

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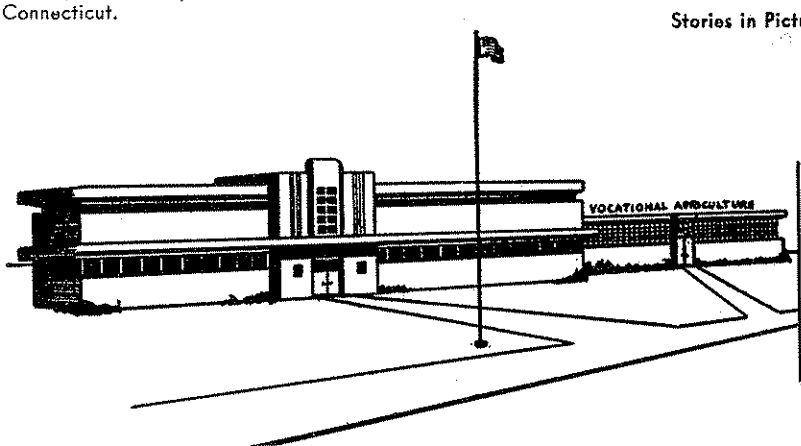
Contents



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Guest Editorial

GORDON L. BERG, Editor, *County Agent & Vo-Ag Teacher*

One of the greatest contributions of agriculture today is supplying our cities with new blood daily for their teeming industries. We used to deplore the thought of our best farm boys leaving for a new life in the "sinful cities." Now we expect it. But some of our vocational agriculture leaders still are thinking in the past, which leads me to the question: is there a danger that vocational agriculture will be by-passed by more progressive programs for youth?

This depressing thought occurred to me recently when I read a statement by one of our respected vocational agriculture leaders. His attitude toward the "shiftless city kid" was the same as we were often confronted with back in the thirties.

He did not seem to realize that today's farm and city youngsters dress alike, think alike, and *dream* alike.

I don't think it is rank heresy to say that I really feel for the city kid who dreams every night of enrolling in Vo-Ag classes—hoping against terrific odds that the "paper curtain" will soon be lifted so that he may compete against the "lucky" farm kid for the right to farm.

"But the Law states . . ."

Oh, how I loathe that stock answer for every Vo-Ag problem! In a progressive age that has tamed the atom, we are still shackled by a *law* which recognizes that only a farm kid can farm . . . only a farm kid can inherit the rich feeling that goes with the crumbling of a handful of soil. In effect, we are limiting the future development of our program by not recognizing the worth of the city boy, whose ancestors were farmers.

Have you ever considered the thought that perhaps agriculture, too, could use some *new blood?* I was talking to a farmer recently who said his boy had just quit high school. He said Junior had gotten tired of school and thought he would like to farm. I found out later that his Dad had actually offered him a new car if he would go into partnership with him. The truth of the matter was that the boy had envisioned greener pastures elsewhere. It was easy to see that he was not interested in farming at all.

Now you are probably wondering the same thing as I am. If the farmer must buy the boy a new car the first year of farming, what will the farmer's predicament be the next year—and the next? How much more prestige will agriculture lose from situations like this? But there is an equally significant question to be asked at this point: what about the farm boy who yearns to farm but can't? He has neither the training nor the capital. Many a city boy would love to take the place of his farm cousin—even minus the car. Here is a case where industry and agriculture would both be better off if the two boys mentioned would trade positions, but, unfortunately, it is not that easy.

Will we be accused of creating a mammoth agricultural blunder by encouraging the same farmers to operate our farms generation after generation irrespective of their capabilities? Is this a service to agricul-

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Should we change our program in view of recent developments?[1]

W. HOWARD MARTIN, Teacher Education,
University of Connecticut

The fact that we are concerned with "developments" means that we are aware of *change.* Furthermore, it indicates a desire to anticipate ways in which change will influence our work and lives. Concern with change is normal. Concern is deep seated in times of confusion and crisis.

Change brings fresh challenges. Our success in defining the basic challenges, mapping plans of action and evolving a superior response will determine the course of history (Toynbee). Change, therefore, requires a redirection in habits of thought, action, and feeling. It requires the courage to put forth and test new hypotheses.

Change is not new. It is a permanent characteristic in the world of men. Most of the change is man-made. The disturbing feature of change is unevenness in rates of acceleration, rather than change itself.

Thus in referring to recent developments, we talk about changes in life conditions which are most noticed, and not about all changes. It is these noticeable changes which necessitate a look at other areas with a view to equalizing and adjusting rates of change. Since change is on-going, there is no clearly defined starting point. Our reference to "recent" is meant to describe the state of our attention and interest rather than to say that this or that development took place yesterday.

A brief review of the general situation is an essential first step. Our second step will be to consider objectives with particular reference to new or modified objectives. Finally, we shall venture certain recommendations indicating actions to be taken. The relationships existing among situations, objectives, and recommendations, should be noted. Errors exist in any analysis of the situation as they have in the past. Hence, all conclusions and recommendations should be accepted as hypotheses appropriate, perhaps, for critical testing.

General Situation

From childhood—and even before—to the grave, man is dependent upon other men. The life which an individual cherishes is largely a product of the relationships which he builds among men. The relationships involve patterns of acting, thinking, and feeling in relation to activities of production, consumption, and, indeed, to all human activities. Changes which upset these relationships disturb us as persons.

Schools enter the picture when the group becomes complex. Complexity is marked by varied and specialized activities carried on in separate and ever changing groups. The immature or untutored may interfere with the success of the specialized group, or endanger their own health; hence, they no longer have the opportunity for direct and continuous learnings in many life activities of the group. Other arguments which may be advanced to further support the necessity for establishing schools include:

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[1]Address before the Convention of Vermont Education Association, Burlington, October, 1954.

Help is needed!

Ways in which the Vo-Ag teacher could be assisted in his work

BEN BRISTOL, Graduate Assistant, The Pennsylvania State University

Ben Bristol

THE local teacher of vocational agriculture is the deciding factor in whether the program succeeds or fails in his community. His actions, attitudes, and ideas will determine the achievements of vocational education in agriculture on State and National levels as well.

A good instructor is one of the busiest men in the community. There are numerous demands being made of him constantly during all his waking hours, and he is subjected to pressures from many sources.

School officials are often interested in maintaining a "proper balance" in the school system whereby no single department will be so outstanding that others will suffer by comparison. They and other individuals and groups in the community need to be sold and resold on the value of the objectives of vocational education in agriculture as they apply to the particular area. The importance of immediate savings may appear greater than long range community plans which will mature at future dates.

The vocational agriculture teacher must face new problems every day and help resolve them to the satisfaction of many diverse groups and interests. In some instances his advice may be accepted almost too readily, and a farm practice involving an investment of several thousand dollars may be his responsibility.

Teachers Need Help

With all their numerous responsibilities and needs, it is somewhat surprising that teachers of vocational agriculture have been given only a relatively small amount of help, when compared with that available to workers in related fields of agriculture. It is probably true that State supervisory staffs and the teacher-training personnel of the land-grant colleges are the agencies most active in giving needed assistance to local teachers of vocational agriculture. It is noteworthy, however, that early studies have indicated a general lack of adequate supervisory facilities in many States. Later studies have pointed out that this same difficulty is present even today in some States.

An increase in State supervisory staffs and personnel of teacher-training departments has not always meant a proportionate increase in the help given the local instructor. With the additional funds made available by the Congress of 1954 for expansion of services offered by departments of vocational agriculture, supervisors on county and State levels are in a fortunate position to bring about revision of outmoded methods of supervision. From among the many ideas which might well be given consideration the following are suggested.

Some Possible Aids

1. The consolidation and simplification of reports required of the local teacher so as to prevent needless duplication would certainly be a step in the right direction. The discontinuance of outdated reporting forms, and those which are no longer needed, is a necessity easily overlooked. Supervisors are apparently reluctant to discontinue the use of old reporting forms required from teachers in spite of the addition of many new ones. The system becomes unwieldy with few workable ideas for consolidation or elimination of required forms being implemented, while all kinds of ideas for additional records seem to "pour forth" in a never-ending "paper flood." Any time an additional report is requested, ways should be explored to eliminate one or more of those previously required.

2. The increased emphasis on research by regional and national committees has often added to the work load of the local representative of vocational education in agriculture. It is not unusual for a teacher who hardly has time to read the daily newspaper and professional magazines to be asked to complete a long and involved questionnaire "as soon as possible." The use of research techniques which require less effort from cooperating teachers is essential. The long questionnaire has been used too often. It is also important that when a significant study has been completed local teachers, as well as their administrators, should be informed about the findings and conclusions. This is especially true in cases where teachers have cooperated in making a study.

3. Supervisors themselves are loaded down with other duties listed as essential, and find it difficult to take the necessary time to give needed assistance to all teachers in the State. The enlargement of supervisory staffs to make possible the release of additional personnel from routine office and "paper work" would do much to relieve this condition. Certain States are making concentrated efforts to help beginning teachers with their problems. Older, more experienced teachers also have problems which a trained supervisor can assist in solving.

More Effective Supervision

4. It should be general policy to set aside enough time for each trip to the local department so that the farming programs of all-day, young farmers, and adults can be seen. "Flying visits" to local departments accomplish little in most cases. This is especially true if they come as a surprise to the teacher being supervised. This procedure does not give the teacher a chance to set up an interview with the school administrator, or even a chance to "think through" questions which he may have wished to ask the supervisor. Allowing adequate time for supervisory visits will discourage so-called "paper departments," and give the supervisor essential information which might not be available to him otherwise. A conference with the school administrator is a necessity which is easily neglected.

5. Continuing a program of self-improvement so as to keep abreast of the latest technical and human aspects of agricultural education and related fields is also an important consideration. Supervisors should be as concerned about this area as they expect the teachers to be.

It is realized that the factors given are far from complete, and represent only a few phases of the assistance which a teacher might reasonably expect to receive. Comparatively few studies have been completed which bear directly on how well such principles are being carried out in the various States. Evidence is available, however, which indicates that there is need for improvement in this area of vocational education in agriculture.

Anything which can be done to give real assistance to each local teacher of vocational agriculture will strengthen the entire program of vocational education in agriculture in the United States. Supervisory techniques must keep pace with the great advances already made in other phases of the program in order to be justified. □

Guest Editorial - -

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ture and our great nation—which will be depending more and more on fewer, but better farmers in the years to come?

What am I driving at? Well, is it wrong to say that vocational agriculture has now grown to the point where it should be for *all the people*—not just for *all the farm people?* I believe that the decision we make at this point will influence future Federal appropriations for vocational agriculture. Surely, it will mean the teaching of our rapidly expanding related occupations in agriculture—not just farming. It would also mean employment of more teachers, bigger budgets and a vocational agriculture program that has finally broken out of its knee pants and grown up! □

Featuring in March—

"Improving Pupils' Farming Programs"

Administration of programs is affected by initial planning

Research as a guide for planning a local program of vocational agriculture*

E. C. PASOUR, JR., JOHN H. BOLLINGER, SELZ C. MAYO, and GERALD B. JAMES,** North Carolina State College

CONDUCTING a research study in the local community is a part of every student teacher's participating experiences in vocational agriculture in North Carolina. Emphasis is placed upon research methods and techniques as a basis for securing information needed for planning a local program of vocational agriculture.

This study was conducted in a rural community in North Carolina during the 1953-54 school year. The village in which the high school was located had a population of approximately 400. There were 41 boys enrolled in the high school. All 41 were enrolled in vocational agriculture.

Purposes of the Study

The purposes of the study were:

1. to ascertain what proportion of the boys enrolled in Vo-Ag intended to farm,
2. to ascertain what proportion of those who had been graduated or who had dropped out during the past three years were actually farming, or intended to farm after separation from military service, and
3. to ascertain some of the factors which influenced the boys' decisions to farm or not to farm.

*This article is based upon a study conducted by Messrs. Pasour and Bollinger in the community in which they did their student teaching.

**Messrs. Pasour and Bollinger are seniors in Agricultural Education, Dr. Mayo is Associate Professor of Rural Sociology, and Dr. James is Assistant Professor of Agricultural Education.

Method

Data were secured through discussion procedures in class, in small groups, and with individuals. Some information was written on questionnaire forms by the boys. Other data were recorded by the student teachers during or following conferences with the boys.

The cumulative record files on individuals kept in the agriculture department were helpful. Too, the teacher of agriculture was able to provide background information which proved helpful in many cases.

Findings

A. *Boys Enrolled in Vocational Agriculture*

The enrollment in vocational agriculture by class was: freshmen—14, sophomores—7, juniors—12, and seniors—8.

Table I indicates that only six of the 14 freshmen intended to farm upon graduation from high school. One of the seven sophomores, one of the 12 juniors, and four of the eight seniors intended to become farmers.

Eleven of the 21 freshmen and sophomores indicated that at the time of enrollment in vocational agriculture they intended to become farmers. At the time of the interviews only seven of the 21 stated that they intended to engage in farming.

TABLE I—Number of High School Boys Enrolled in Vocational Agriculture Who Intend to Farm

Class	*Boys in Class*	*No. Who Intended to Farm*	*No. Who Intended to Farm at the time of Enrollment**
Ag. 1	14	6	9
Ag. 2	7	1	2
Ag. 3	12	1	1
Ag. 4	8	4	4
Total	41	12	16

*According to report by boys at the time of the interviews.

The percentage of all 41 boys who intended to farm at the time of enrollment in vocational agriculture was 39. The percentage who intended to farm at the time of the interviews had dropped in both the freshman and sophomore classes, but remained the same for the junior and senior classes. The percentage for all four classes was 29.

B. *Attitude of Boys Toward Vocational Agriculture*

Even though the percentage who planned to engage in farming was low, 83 per cent of the boys stated that they liked vocational agriculture better than their other high school courses. Eleven of the 12 freshmen, five of the six sophomores, all 12 juniors, and six of the eight seniors liked vocational agriculture better than their other courses.

C. *Boys Who Were Graduated or Dropped Out*

Twenty-two boys either dropped out or were graduated from the high school during the three preceding years. Eight boys were farming and three others

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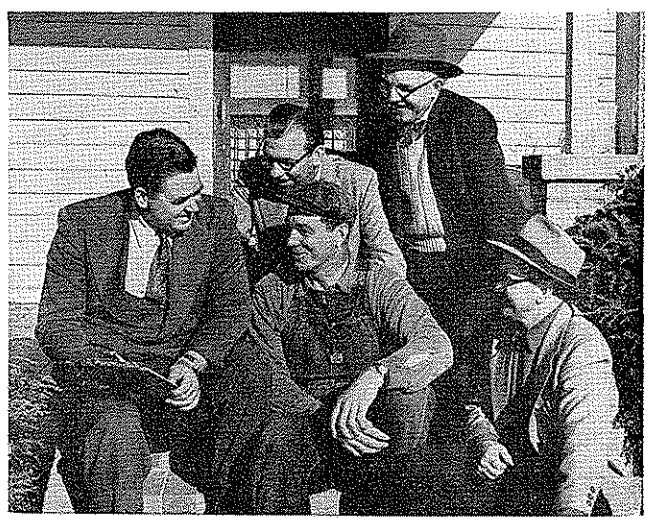
Two student teachers secure guidance in evaluating their plans for conducting a community study in their student teaching center. The local teacher of agriculture, who knows the community, and a member of the Rural Sociology Department of the College, who is well trained and experienced in research in rural communities, are able to give such guidance. Those shown above are, left to right: Dr. S. C. Mayo, Rural Sociology; W. L. McCleney, teacher of agriculture, Bladenboro, North Carolina, and W. E. Alford and Charles E. Reardon, student teachers. (Photo by J. K. Coggin.)



The above picture represents the five groups essential to the proper functioning of a student teacher research program in a rural community. The student teacher (left) is shown securing needed information from a farmer (center) under the supervision of his leaders. Such initial training experience is essential. Those shown are, left to right: Jesse Lassiter, student teacher; Dr. S. C. Mayo, Rural Sociology; Randall E. Turlington, farmer; Dr. C. C. Scarborough, Agricultural Education, and Murray Philips, teacher of agriculture, Coats, North Carolina. Photo by J. K. Coggin.)

Research as a Guide - -

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planned to farm upon separation from military service. Six of the eight who were farming had dropped out of school while only two had been graduated.

D. *Factors That May Have Affected Boys' Decisions*

Eight of the 12 boys enrolled in vocational agriculture who planned to engage in farming lived on farms owned by their parents. Fourteen of the 29 boys who did not plan to farm were from tenant farms and fifteen were from family-owned farms.

Six of the eight boys who dropped out or were graduated and were farming were reared on farms owned by their parents. Furthermore, of those 14 boys not farming, nine were reared on tenant farms.

The parents of 27 of the 41 high school boys were engaged in farming, but only 12 of the boys intended to become farmers.

Thirty-one of the 41 boys lived on farms while the remaining 10 lived in the small town. Thirty-two stated that they preferred to live in the country. Only 12 of the 41 boys planned to farm full-time as their life's work, yet 22 planned to farm sometime, either part-time or full-time.

The replies of the 41 boys enrolled in vocational agriculture regarding why they enrolled were:

Because I like it	14
To learn to farm better	12
Learn many different things	4
Like the teacher	4
Need unit to graduate	4
It is an easy course	2
To kill time	1

Conclusions and Implications

1. Forty-one boys were enrolled in the high school and all 41 were enrolled in vocational agriculture. Upon initially enrolling in vocational agriculture 16 of the 41 boys had planned to become farmers. At the time of this study only 12 intended to engage in farming as a vocation. These data imply a need for broader course offerings in the high school. Why should all high school boys study vocational agriculture when only one-third plan to farm?

2. Occupational choices of boys who did not plan to engage in farming included: jet pilot, sports announcer, horse racer, baseball player, and African game hunter. Numerous studies have indicated that boys change their career plans while in school and after being graduated. Some of these may reach their ambitions, however many apparently choose careers without adequate knowledge regarding the education, training, and qualifications required. Implications may readily be seen for an improved guidance program.

3. Eleven of the 22 boys who had been graduated or had dropped out of school during the preceding three years were engaged in farming or definitely intended to do so upon separation from military service. Only 12 of those enrolled in vocational agriculture planned to engage in farming. This study, similar to many others, appears to indicate that some who do not intend to farm may be farming in the not too distant future.

4. From the group who had been graduated or had dropped out of school and were farming, six of the eight had dropped out of school while only two had been graduated. These data indicate a need for strong emphasis on the young farmer program in order to help young farmers toward establishment in farming. They did not receive the amount of agricultural education while in high school that they need and can use.

5. Even though the percentage who planned to engage in farming was low, 83 per cent of the boys stated that they liked vocational agriculture better than their other high school courses. These data imply a need for further study. It is conceivable that some boys are interested in farming and like their vocational agriculture courses, but with their lack of knowledge of other vocations, tend to see chiefly the advantages in those vocations. Too, perhaps other vocational courses should be added to the curriculum.

6. Six of the eight boys who dropped out or were graduated from high school and were farming were reared on farms owned by their parents. Furthermore, of those 14 who were not farming nine were reared on tenant farms. These data indicate that a much higher percentage of boys from farm-owner families engage in farming than boys from tenant families. Other studies conducted in North Carolina point to the same conclusion.[1] It appears as if the boys reared on farms owned by their families not only have a greater desire to farm, but also have the ability to fulfill this desire. Emphasis upon farm financing, how to obtain a loan, farm appraisal, how to buy a farm, landlord-tenant relations, and rental agreements might prove beneficial.

7. During the 1953-54 school year there were 572 departments of vocational agriculture employing 591 teachers in operation in North Carolina. There were 29,996 high school boys enrolled in courses in vocational agriculture. There were 193,679 farm operators, including all tenants, in the state in 1950 according to the U. S. Census of Agriculture. It appears obvious that the number of replacements being trained is too great. Typically, only about 45 per cent of the boys who study vocational agriculture engage in farming. These data imply a need for improved guidance programs in the secondary schools. Perhaps the addition of courses in general or non-vocational agriculture to the curriculums would enable many who desire to do so to study agriculture more nearly adapted to their needs than vocational agriculture. Such a movement would also lighten the high school student load on teachers of vocational agriculture, thereby, releasing more time for work with the adult and young farmers who are now actively engaged in farming.

8. A close examination of the objectives of vocational agriculture give guidance to a community in planning and initiating its local program on a sound basis. An implication for study and changes is easily seen when "to train present and prospective farmers for proficiency in farming" is the aim and less than one-third of the high school boys enrolled intend to farm.

9. Continuous evaluation and research is the basis for progress in developing sound programs of vocational agriculture. A local program of vocational agriculture cannot be carried out without research as a basis for the planning. Otherwise, it becomes academic rather than *vocational;* it becomes guess work based upon something other than the genuine needs and interests of the farmers and prospective farmers of the community. Research is not something which can be conducted only by cancer research specialists, washing powder producers, and cigarette manufacturers. It is not something which must be carried out in elaborately equipped laboratories and libraries. A local community is a research laboratory for the teacher of vocational agriculture. Through research the teacher can locate the problems, needs, and weaknesses, which may be alleviated or improved through vocational agriculture. These problems and needs form the basis for developing a local program of *vocational* agriculture. □

[1] Mayo, Selz C., "A Challenge for Future Farmers on Becoming a Farm Owner in North Carolina." *N. C. State Agriculturist,* February, 1949.

Should We Change - -

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a. delay in choosing activities increases flexibility and adaptability of the individual and, hence, of the group

b. more extensive preparatory basis is required to enter direct experience in specialized activities

c. society composed of diverse groups, requires a common foundation of character and citizenship

d. democratic society requires continuing revision of its values and the means used to obtain them.

Individuals see one or the other of such arguments as pointing to the dominant purpose which schools should serve. Hence, conceptions differ as to the role of public education.

Vocational education is recognized as an integral part of the program of the public schools. As a part of the program, it is subjected to similar stresses and strains resulting from change. And whether or not we like it, vocational education in public schools reflects the prevailing concepts of the purposes to be served by public schools. We in vocational education have a real opportunity to share in the task of re-thinking concepts of what public schools *should be* in our communities, and more particularly what should be our programs of vocational education.

Developments—Our concepts as to what public schools *should be,* in part, are based on certain "developments." You may not agree with the developments selected as critical in the situation. Certainly, it is to be hoped that careful study and discussion would be utilized

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in a final selection of critical developments in the situation.

Critical Developments

1. The development of atomic power and air transportation.
2. The growing threat of communism.
3. The increase in numbers, actual and proportional, of children.
4. The rapid expansion of technological innovations in agriculture (and in other forms of production).
5. The increase in social concern for the welfare of an individual.

None of these statements startle you. They are not recent in terms of months or days. The possibilities of atomic power were postulated as long ago as I studied chemistry. Karl Marx wrote *Das Capital* over 100 years ago. All children now in schools were born 5-6 years ago. The foundations were set for an agricultural technology with the passage of the Morrill Act, nearly 100 years ago. Concern for the welfare of the individual man was an ideal made clear to us through Christ. Yet, in total, the cumulative effects of these developments are changing the values and rules by which we regulate life activities.

In Education—The schools of the public are filled. More school buildings are required. Capital outlay costs plus increased operating costs of the present are straining the older methods of financing education. Rural areas, with small taxing units and relatively small school districts are reaching limits to which taxes on real estate may be pushed. Yet, in terms of the total value of goods and services produced, we could spend more on schools.

As schools are beset with financial problems, it is natural that large taxpayers often are critical of costs. However, criticism of methods and philosophy of the public schools is equally, if not more, serious. This criticism is a manifestation of the forces acting upon us. There is uncertainty as to courses of action of most promise for personal and national security. Hence, public schools are unclear as to values which they should stress.

In Agriculture—Farmers, and others in agriculture are finding these to be confused times. The common definition of success in farming embraces the concept of a family owned farm operating at high levels of production per unit of labor and capital. It is a conception of success which has had wide acceptance in American agriculture. Efforts of all have been centered on this ideal of success. Hence, changes in conditions which upset this conception of success are serious matters.

Declining foreign markets and bumper crops have filled America's storehouses with food. Farm organizations and Congress have given their attention to problems of the farmers. What the goals should be and what plans of action should be followed to achieve them remain unsettled.

It is clear that farmers are being forced to live in a situation which presents conflicts. Surpluses and acreage control make the challenge to further increases in production seem unreal to many. The recent decline in relative income to those in agriculture as productive efficiency has increased in recent years causes farmers to question the validity of the production ideal as presently conceived. Furthermore, the technological innovations are forcing drastic adjustments in the so called "family farm." Increased capitalization, specialization, growth in professionalized farm management services, and other factors point to the evolution of a systematized, routinized, and simplified type of "farm firm." The adjustment of farm work tends to upset relationships of those engaged in the work of the farm. The "specifics" which have been identified seem to indicate a need to consider for vocational education in agriculture the following broad aims:

a. aiding individuals and groups to reappraise values and ideals related specifically to agriculture
b. developing personality and character traits, abilities and attitudes favorable to a reconstruction of values and ideals.

Some of our challenges—A challenge exists in a situation when the pathways to realizing human aspiration are blocked. Thus a challenge may reflect the blocking elements as well as the aspirational elements of the situation. For the most part, the usage of the word challenge reflects an aspirational or ideological orientation.

Four challenges of general nature are given. What is your reaction to them?

a. maintaining freedom to study, consider, discuss, and decide issues of concern is essential to a democratic form of social control
b. learning to live with or satisfactorily resolve current value conflicts is essential to healthy personality
c. effecting mutually satisfying relationships among people at community, national, and international levels is essential to peaceful living, and further growth of human mind
d. establishing a climate favorable to the continued technological development and innovation is necessary to continued economic advancement.

Perhaps you will wish to add to the list, or condense it yet more. By no means are these regarded as being the only challenges facing the American people.

Objectives for Vocational Education in Agriculture

Providing we do accept these challenges as essential and real for the times, we can draw from them a number of implications for programs of vocational education in agriculture. We can suggest certain plans of action appropriate to the recent developments.

We shall point to a number of objectives which might be deemed appropriate in the situation. The objectives proposed do not constitute a complete or even a comprehensive listing for vocational education in agriculture. Careful deliberation of responsible groups is urged as a first check on their possible significance. In addition, older objectives should be re-examined to determine their relevance in the present situation. It is likely that many or most of the older objectives will be retained, but the degree of emphasis afforded them could be modified.

The objectives proposed are ones *not* generally recognized or pursued in current programs of vocational agriculture. Some few teachers have been conscious of such objectives, and have made a beginning in shaping their programs to such ends.

Proposed Objectives

The program should aid groups and individuals:

1. to clarify goals and purposes related to their participation in an agricultural vocation
2. to identify and discuss agricultural problems of local, state, national, and international scope
3. to discuss and evaluate existing and proposed legislation involving agricultural policy
4. to participate in off-farm activities related to an implementation or execution of agricultural policy
5. to discuss controversial issues in agriculture
6. to re-think farming operations in light of new conditions
7. to plan cooperatively for readjustments in farming operations
8. to compare opportunities for off-farm and farm employment in an objective manner
9. to appraise local patterns and trends in land tenure, size of farms and methods of transferring control
10. to study and improve local and regional services for farm families, including education
11. to establish and maintain mutually satisfying relationships with other groups in the economy.

Recommendations

The improvement or expansion objectives suggested are of a long range nature. A plan of action is required if their realization is to be expedited. Such a plan of action must enjoy the general sanction of those concerned including teachers, parents, and others. Hence, the recommendations which follow are regarded more strictly as affording a starting point for local and state planning:

1. initiate more in-service courses, pilot programs, and research dealing with the problem of teaching controversial issues in agriculture
2. extend pre-service and in-service courses in agricultural economics and sociology which will afford a better background in the broad social problems of agriculture
3. enlist the help and moral support of local, regional, and state consulting or advisory committees to rethink the instructional program
4. develop a greatly increased supply of teaching materials in the fields of agricultural policy, rural sociology, and related fields

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A frequent problem in administering local programs

Integrating instruction in farm mechanics

With other aspects of the program of vocational agriculture

JESSE A. MORRIS, Graduate Student, Michigan State College

Jesse A. Morris

FARM mechanics should be taught as an integral part of the course in vocational agriculture. It is just as much a part of the course as is instruction in livestock, farm crops, farm management, or NFA and FFA. The instruction in farm mechanics should be integrated with all of these aspects of the program of vocational agriculture if boys are to become progressively established in farming.

In the early days of vocational education in agriculture, farm mechanics usually was taught as a separate course. Many schools are now turning to the integrated program of vocational agriculture. The writer feels that as ways and means are found to solve some of the problems which exist with an integrated program, many more teachers will turn to this type of program. It is the purpose of this article to discuss the advantages of an integrated program of vocational agriculture, and to make suggestions for the functional operation of such a program.

The Advantages of Integrating Farm Mechanics

There are many advantages to be realized in teaching farm mechanics as an integrated part of the program of vocational agriculture.

1. The mechanical aspect of the agricultural instruction can be carried out in the shop at the time the classroom instruction is given. This should increase understanding of the principles being taught. In the case of operative jobs where skills must be acquired, the student is given an opportunity to practice these skills as a laboratory part of his classwork.

2. An integrated program makes teaching more realistic, and more effective when the student actually has the opportunity to study and to learn how to do correctly the mechanical jobs arising from his supervised farming program at the time that the need arises. More learning will take place if instruction is based on the needs of the supervised farming program of the boy. Skills learned at such times will make a greater contribution toward assisting the boy to become established in farming.

3. In an integrated course of vocational agriculture, mechanical skills can be taught on the ability level of the student. There are some mechanical skills that advanced students naturally grasp better than beginning students. If farm mechanics is taught each year in each class, the instructor can arrange the instruction according to the ability level and maturity of the boys.

4. Variety is added to the instruction when farm mechanics is taught on an integrated basis. This is very necessary if the instructor is desirous of maintaining a high degree of interest at all times in the class.

5. The farm mechanics instruction is always given by a teacher who is familiar with the needs of the supervised farming program of the boy and the farming practices of the community. This may or may not be true when the instruction in farm mechanics is taught in a separate course inasmuch as shop teachers who are not trained teachers of vocational agriculture teach farm mechanics in some schools. Many farm shop jobs will emerge as the supervised farming program of the boy proceeds. In an integrated program, these jobs can be taught immediately to the boy at the time of greatest need.

Overcoming the Problem of Space

One of the major reasons why many schools teach farm mechanics as a separate course is to utilize shop facilities and equipment more efficiently. It is believed that adequate planning on the part of the school administrators and teachers of shop classes would permit practically all schools to integrate farm mechanics instruction and at the same time efficiently use facilities and equipment. Since two or more shop teachers using the same facilities have problems in the area of scheduling, the following suggestions are offered:

1. Schedule classes so that only one class will use the shop at a specified time. In many of the smaller rural schools which do not offer many different kinds of shop courses, the other shop courses may be scheduled during periods when vocational agriculture is not offered.

2. Each shop instructor could arrange his shop course in units or areas so that when one teacher is using the classroom, the other teacher could use the shop. A mutual agreement could be worked out among the teachers in such a situation.

3. If the shop is large enough to provide adequate space for two classes at the same time, such classes could be scheduled if the shop is divided into work areas for different types of work. The possibility of using temporary partitions or folding walls could also be considered.

4. The school administrators and the teachers of shop classes should meet periodically to discuss the problem of scheduling and to iron out difficulties that arise from the use of the shop by more than one teacher. Every effort should be made to plan and schedule the use of the facilities so that as many individuals as possible can profitably make use of them.

Another reason why some schools now offer farm mechanics as a separate course is that the teacher of vocational agriculture is not qualified to teach farm mechanics and the course must be offered at a separate time so that the regular shop teacher can teach it. This problem is being solved by agricultural colleges which offer a number of courses in farm mechanics which teachers of vocational agriculture can study on Saturdays and during the summer months to qualify to teach farm mechanics. Most of the young men who are currently graduating from college in agricultural education are qualified to teach farm mechanics. It is believed that these two factors should increase the number of schools which offer an integrated program of farm mechanics.

Integrating Farm Mechanics with Other Agricultural Instruction

At what point in the various aspects of the program of vocational agriculture should instruction in farm mechanics be integrated? The writer believes that there are opportune times during the course in vocational agriculture when instruction in farm mechanics should be offered. In a graduate course, the writer developed a chart which he believes will prove to be of value to teachers of vocational agriculture in deciding when and where to teach farm mechanics in the vocational agriculture course. This chart is suggestive only and teachers will need to make revisions in order to adapt it to their local community. (See chart on page 177.)

A careful analysis of the chart will show the relationship of instruction in farm mechanics to livestock production, crop production, farm management, and NFA or FFA. An "X" has been placed on the chart at points where farm mechanics instruction should be integrated with instruction in other aspects of the program of vocational agriculture. Reading horizontally to the right on the chart from the areas of farm mechanics, and vertically down from the top (from the other areas of the program of vocational agriculture) until point "X" is reached, one can locate the point where the instruction should be integrated. If farm mechanics instruction is given at these points, it is believed that it will be more effective.

Conclusion

As teachers of vocational agriculture, we should challenge ourselves either to integrate our farm mechanics instruction with the other aspects of the program of vocational agriculture or improve its integration. □

Integrating Farm Mechanics Instruction with Other Aspects of the Program of Vocational Agriculture

AREAS OF FARM MECHANICS	LIVESTOCK						CROPS								FARM MANAGEMENT							(N) or FFA					
	Selecting	*Feeding*	*Showing*	*Housing*	*Breeding*	*Disease-pests*	*Selecting land*	*Types, Varieties*	*Preparing land*	*Fertilizers*	*Plant-culture*	*Disease-pests*	*Harvest-storage*	*Soil conservation*	*Records*	*Det-power needs*	*Manager's equipment*	*Farm improvements*	*Home improvements*	*Food, feed, budget*	*Insurance, taxes, depreciation*	*Membership*	*Cooperation*	*Community-improvement*	*Public relations*	*Program planning*	*Earnings, and investments*
I. FARM SHOP WORK																											
Selection of tools									X							X											
Sharpening tools		X							X								X						X				
Care and use of tools		X		X					X								X	X	X								
Woodwork and carpentry		X	X	X	X					X		X	X		X			X	X				X	X			
Sheetmetal work		X		X														X	X								
Elementary forge work				X					X									X	X								
Welding, electric, etc.									X									X	X				X				
Simple plumbing		X				X												X	X				X	X			
Rope work			X										X						X				X				
II. FARM POWER MACHINERY																											
Selection						X		X	X	X						X					X	X					X
Management						X									X		X				X						X
Adjustment and operation						X		X	X	X	X	X	X														
III. FARM BUILDINGS AND CONVENIENCES																											
Scale drawings (elementary)				X														X						X			
Plan drawings (elementary)				X														X						X			
Farmstead layout				X			X											X	X					X			
Needs of farm houses		X														X			X		X			X			
Shelters and buildings		X		X											X			X			X			X			
Storage buildings		X											X					X	X		X						
Water systems																		X			X						
Septic and sewage disposal																			X					X			
Heating				X									X			X			X					X			
IV. SOIL AND WATER MANAGEMENT																											
Elementary leveling														X													
Land measuring and mapping		X					X							X				X						X			
Drainage and irrigation						X			X	X				X													
Terracing and contouring							X							X										X			
Strip cropping							X							X													
V. RURAL ELECTRIFICATION																											
Selecting equipment				X												X		X	X								
Installing equipment				X									X					X	X								
Operating equipment				X									X				X	X	X								
Maintaining equipment				X									X		X		X	X	X		X						

Should We Change - -

(Continued from Page 175)

5. conduct studies on the amount and character of farmer participation in off-farm activities involving agricultural problems
6. reorganize the program of instruction in the junior and senior years to provide increased emphasis on the indicated objectives
7. establish community farm-forum series for adults
8. involve farm-family members in on-farm instruction which seeks to make clear the relation of the present challenge to farm operations
9. investigate and experiment with the opportunities of providing directed practice in farm related employment
10. search for fresh approaches to "communicating" with members of families from marginal farms.

Summary

The present situation is in process. Developments, having their origins in the past and their completions in the future, constitute a moving center of interest. Some of these developments are technological, as the atom bomb, airplane, and farm tractor, others are in the nature of human ideals and aspirations. Any assessment of the present situation depends upon what *developments* we perceive as being of crucial importance. Atomic power in an air age, acceleration in birth rate, rapid expansion of technological innovations, threats in communism, and a social concern for the individual were indicated as critical factors in the present situation.

Objectives were suggested which may be proved worthy of guiding efforts to deal with the present situation. These objectives would direct effort to providing aid to individuals in:

a. appraising the situations
b. clarifying values and goals, and
c. developing personality traits essential to cooperative action in obtaining new goals. (Continued on Page 180)

A teacher-delegate reports on —

The National Conference on Rural Education

A source of background for future administration of Vo-Ag programs

HARRY I. KNOX, Vo-Ag Instructor, Bellwood, Pennsylvania

THE conference on Rural Education was held in Washington, D.C., last October 4, 5 and 6, with some 1,200 educators in attendance. While the conference generally consisted of such school personnel as County Superintendents, Supervising Principals, Classroom Teachers, Representatives of Parent Teacher Groups, School Board members, and specialists in various fields of education, there were persons of national reputation, such as: Samuel M. Brownell, U. S. Commissioner of Education; Howard A. Dawson, Executive Secretary, Department of Rural Education; Frank W. Cyr, Teacher's College, Columbia University; Victor Reuther, Congress of Industrial Organization; Walter D. Fuller, Chairman of the Board, Curtiss Publishing Company; Ezra Taft Benson, Secretary, U. S. Department of Agriculture; Mrs. Eleanor Roosevelt, Representative to the United Nations Council.

Sufficient to say that this combination of leaders in the field of education, coupled with supervisors and teachers did constitute a group qualified to consider educational problems as well as to offer potential solutions.

The thinking of the conference may be summarized, more or less briefly, as follows:

The Situation

1. While the on-farm population has decreased through the application of better technology and power equipment, the rural non-farm population is increasing at profound rates, further increasing the load of rural schools.

2. When rural pupils, through consolidation, attend urban schools, or urban pupils, through population shifts, attend rural schools, the problem does not cease to exist, rather the urban and the rural schools both face new and unsolved problems.

3. During the past decade much progress has been made in rural education planning and functions. At present, rural schools embrace both some of the best and some of the poorest educational institutions in the United States.

4. Poor schools, whether rural or urban, not only fail in their purpose of providing adequate education for their clientele; they constitute a threat to the security and the cultural stabilization of the nation. Sub-standard education is generally associated with a reduced standard of living, the exclusion from job opportunity, the denial of health and welfare facilities, the delimiting of recreational participation, and with such other undesirable results as juvenile delinquency and a lack of civic responsibilities.

5. The providing of competent teachers and adequate school facilities looms as an insurmountable barrier, particularly to the smaller rural districts. The greatest deficit between funds available and funds needed exists in rural districts. Makeshift buildings, facilities and personnel are not the solution; they serve, instead, to deny the pupils the right to the educational program of which they are deserving.

The Problems

1. What are the characteristics of the proposed "good" rural school?

2. How can we overcome the lag that exists between the educational practices now known, and the best that appears to be followed now in general practice?

3. How can we attract and hold good teachers?

4. How can we adjust the financial load among the various degrees of wealth, population, industrial development, and occupational compensation which now exists, particularly in view of the wide variation in assessments, taxation, and reimbursement now existing?

5. How can we maintain the professional standards of teaching personnel in view of the shortage of teachers, and the trend toward the ever-lowering of standards through the issuing of emergency certification to unqualified personnel?

6. How far may we go in providing state and/or national support of education without losing local control of schools to the point at which local interest is lost? What percentage of school costs should be borne by local districts?

7. How may we equalize the cost of education among the various sources of revenue? In brief, who should pay the bill?

8. How can the education of our adult or post-school population properly be made a part of the educational provisions of our rural communities? What are the responsibilities of our schools in such adult programs?

9. What constitutes the ideal, the practical, and the efficient size of the rural school? How far shall we go with the consolidation of schools into larger units such as the county unit?

10. How do we stir up our population to the realization of the acute problems which confront education. There prevails an apparent attitude of indifference; the needed growth will no doubt make both friends and enemies. How can we accomplish the most without going beyond the bounds of support, tolerance and appreciation?

The Solutions

These solutions, offered for consideration in the several work groups of the Conference, are numbered in keeping with problems listed.

1. The "Good" rural school must provide a wide variety of services, including:

a. teachers, supervisors, and administrators who know rural life and are qualified to deal effectively with such situations;

b. a satisfactory, modern elementary education;

c. a satisfactory, modern secondary education;

d. the bridging of the gap between home and school, and between school and adult life;

e. health services, educational and vocational guidance, library facilities, recreational facilities, and, where needed, school lunches and transportation at public expense;

f. modern and adequate school buildings and facilities requisite to pupil education;

g. having the right to have tax resources of the community, state and nation at the disposal of the school in the guaranteeing of educational opportunity.

2. There are communities wherein religious practices, social control, and a clinging to traditional practices do retard the school growth; such instances deserve the services of the most capable supervisors and teachers available, and must necessarily make progress only as fast as proper appreciation for accomplishments are made manifest. Generally, however, studies show that the communities are often ahead of the schools in their readiness to promote and accept newer educational practices. It is the responsibility of school supervisors and teachers to keep abreast of readiness of their patronage areas.

3. To secure and hold good teachers, the following listings are a "must":

a. Establish worthy standards which must be met by teacher-trainees.

b. "Hold the line" against lowering teacher qualification standards, regardless of how acute the demand; the lowering of standards for teachers conditions a complacency in all other respects which can only result in downgrading generally.

c. Establish satisfactory schedules of teacher salaries, in keeping with other professions.

d. Establish interesting programs of teacher recruiting and training.

e. Urge teacher training institutions to offer practical courses in rural education.

f. Improve teacher welfare conditions, through proper remuneration, therefore, leading to adequate housing, living standards, retirement, sick leave, and leave for professional study, travel, etc.

4. Proper financial load adjustment must necessarily embrace the following:

(Continued on Page 180)

An asset to improving administration of the Vo-Ag program

Making committee work effective

RALPH J. WOODIN, Teacher Education, The Ohio State University

Ralph J. Woodin

"FIBBER McGee" of radio fame says that a committee is a group of the incompetent, appointed by the unthinking, to do the impossible. Unfortunately, some committees which are used in vocational agriculture activities bear certain resemblances to this description. On the other hand, effective committee organization is necessary to the program of vocational agriculture in almost every department. Committees play an important part in developing and carrying out the program of the Future Farmer Chapter. They add to the training and development of those who are members of the Young Farmer Association. More and more teachers are finding the committee a help in making the Adult Farmer Program a broader and more meaningful experience to those who are enrolled. For all of these reasons, teachers of vocational agriculture need to consider carefully some of the ways and means which may be used to make the work of the committees which they advise functional and useful. The following suggestions in regard to committee work are as appropriate for an over-all Advisory or Citizens' Committee as for a committee which has the responsibility for carrying out a single activity in the FFA Chapter.

Teachers may improve the work of their committees by following these major suggestions as well as the "Do's and Don't's" which are given:

1. *Select Committee Members Carefully*
   - 1.1 *Do* select committees before a planned business meeting.
   - 1.2 *Do* make use of an executive committee in selecting important committees.
   - 1.3 *Do* include on each committee persons of differing points of view and differing abilities.
   - 1.4 *Don't* appoint persons to committees who have little interest in the job at hand.
   - 1.5 *Don't* appoint persons to committees who cannot give sufficient time to the activity.
2. *Explain the Purpose of the Committee and the Job to be Done to Committee Chairmen and Members*
   - 2.1 *Do* meet with each new committee at their first meeting.
   - 2.2 *Do* explain what is expected in the way of accomplishment on the part of the committee.
   - 2.3 *Don't* expect every committee to start "on its own steam." The teacher may have to generate some initial enthusiasm.
   - 2.4 *Don't* take over the chairman's responsibility. The advisor should remember that his function is to provide guidance and encouragement.
3. *Develop a Sense of Individual and Group Responsibility on the Part of the Committee*
   - 3.1 *Do* show the committee why its job is important to the success of the organization.
   - 3.2 *Do* make clear the purpose of the committee as to whether it is to investigate, to make recommendations, to evaluate or to take direct action.
   - 3.3 *Don't* use the committee as a rubber stamp to approve your own ideas.
   - 3.4 *Don't* play favorites with individual members of the committee.
4. *Help the Chairman Delegate Responsibilities to Members of the Committee According to Their Interests and Capacities*
   - 4.1 *Do* learn the characteristics and capabilities of each committee member.
   - 4.2 *Do* make use of each member of the committee since each will be able to make some contribution.
   - 4.3 *Don't* do the work for the committee or for any individual member.
   - 4.4 *Don't* neglect to use an agenda for each meeting.
5. *Call for Reports of Progress at Regular Intervals*
   - 5.1 *Do* make sure that a secretary is appointed at the first meeting of committee. (Continued on Page 191)

The author, Ralph J. Woodin, explains a series of charts on committee work which are used in training various vocational agriculture groups in the use of committee work.

R. E. Young, an Ohio teacher of vocational agriculture, makes use of a committee for planning his adult farmer course for the coming year. At this point he is explaining the purpose of the committee and the job to be done by the chairman and each member.

Individual and group responsibility was accepted by the committee which developed plans for this successful steak fry. This activity was sponsored by the Townshend Agricultural Education Society at Ohio State University. Committees are useful in a variety of situations.

National Conference - -

(Continued from Page 178)

a. State funds for support of education on an equalization basis.

b. The determining of property tax based by incompetent assessors must go.

c. The county-wide assessment, or other suitable bases of assessment must be made.

d. The establishment of a state appointed tax equalization board seems advisable.

e. There are many benefits of a state tax commission with deep interest in property tax.

f. Small inefficient school units must give way; the new unit must combine educational proficiency with economic operation.

g. The county unit of operation has been of value in many places; caution must be followed, however, in creating too large and unwieldy school units.

h. A "Minimum budget plan" clarifies school finance needs for many state legislatures.

i. The consensus of opinion holds that federal aid to education will most certainly be required to meet the school housing needs in the time allowed by the most liberal of estimates.

j. We must secure the *most* in buildings with the *least* in dollars through the planning of general purpose units rather than smaller specialized units.

k. Colorful, homey atmospheres of simple functional design contribute best to learning.

5. The maintaining of professional standards for teachers has been dealt with in item three above.

6. The state of Oregon has apparently made the most intensive study in the field of the extent of state aid as against local support for education. Their studies have included the plans of other states, as well as the adoption, correction, and replacement of many plans within their own state. Their final conclusion finds that the greatest satisfaction of citizens, the maintenance of public interest, the reducing of control from high levels, and the greatest service coupled with active interest and participation of citizens comes from approximately 50 per cent local support, and 50 per cent support from state sources. They do add that differential must be made for areas with very high or very low wealth. There is a general feeling that when a too great portion of support comes from remote sources, the interest of citizens lags with the consequent loss to school efficiency.

7. In connection with this point, the answer to the next query, "Who pays the bill?" may prove interesting.

Three plans were aired before the sectional meeting on finance; these three plans were selected for review as they each contain features which have solved a particular problem in that area.

a. Florida and Alabama each add $500.00 per teaching unit to the basic plan of school finance. This does presuppose fairly equal local level income; also this is paid as reimbursement. Therefore, the district needs large borrowing capacity, and large units of administration.

b. Washington (State)—The legislature has set up a plan of matching local funds, based on community wealth. Differentials allow very poor districts to draw as high as 75% state funds for their own 25%; wealthy districts may provide as much as 75% local funds for 25% state funds, with the range in between for other areas of varying wealth.

c. California—The state will lend to each district, beyond the sale of local bonds, for the financing of school buildings. The district then levies a three mill tax to pay back their borrowing over a period of 20 years. This does make for a form of equalization. Some states, however, bar the legal levying of a tax extended over a twenty-year period.

8. Concerning adult education, these points were developed:

a. Every citizen is entitled to such education as he needs to earn a living; it is his right to have such education provided for him. (If he is unable to provide it.)

b. A community which offers education for all levels will command the support of its patrons to a greater degree than those who offer education to children only.

c. We must cease focusing the attention of teacher-training institutions entirely on child education; the training of adults is as equally important.

d. The schools need not be slow to adopt adult education; the communities are ready and asking for it. The facilities and finances of such provision are the problems in need of solution.

9. School size. After many reports, opinions, and views the consensus of opinion held that the most economical, the most favored, by community interest, size of school for rural areas indicated a junior-senior school of approximately 1,200 pupils. Larger units make for unwieldy transportation, lack of familiarity with personnel and patronage areas, while smaller schools suffer in facilities, specialization, and financing. Grade schools of course should be smaller and a closer part of their communities; again, opinion indicated the three-hundred pupil unit as a desirable size.

10. To arouse our population:

a. The press, radio, television, theatre have all become intensively active.

b. Constant repetition pays off for advertising; the school problem must be made a conscious part of the thinking of American citizens.

c. All persons, especially teachers, should be required to read the October copy of *The Ladies Home Journal* for a review of the problem.

The Outlook

Free education in public schools is as old as America itself; it is one of the cherished institutions of American democracy. It will not fall into decay nor lapse into complacency.

Taxation must be levied on all and any resources necessary for the proper guarantee of a satisfactory program of education.

The public in general, and educators specifically, have been faced with tremendous problems in the past; many of those problems were solved. We shall meet and solve the problems currently facing education.

America has attained a dominant position in world leadership in many phases of social and economic development; we must not fall behind in the field of education. An educated populace is a prerequisite to understanding and participation in world citizenship. We cannot risk the hazards of an unenlightened citizenry.

"The uneducated cannot compete with the educated—all other things being equal." □

Should We Change - -

(Continued from Page 177)

Most teachers, it was indicated, were giving more attention to objectives centered around production problems of the family farm. The shift in emphasis implied is one in which increased production is not regarded as an immediate major problem or goal in American agriculture.

A beginning was made in charting action essential to the attainment of the indicated objectives. For the most part, the action stressed would involve the cooperation of teachers in actually testing certain hypotheses.

In total, the analysis, objectives, and suggested plan of action constitute an approach to evolving a changed emphasis for the program of education in vocational agriculture. The situation calls for systematic and thorough consideration of our program. This proposed approach, partial and fumbling though it be, is offered with a view to encouraging the profession to join in a cooperative effort to re-appraise the role of education in vocational agriculture for America today. □

The Cover Picture

Pictured on the cover page is Ray Long of the Pomeroy, Washington, FFA Chapter, with a part of the Chapter flock. The original start came from a Sears-Roebuck Foundation grant in 1952, when the Pomeroy FFA Chapter obtained eight purebred Hampshire ewes. This project is conducted on a rotating basis by which two boys now have a start on a farm flock. Each boy is under contract to return replacement ewe lambs to the project, but is allowed to keep the additional increase as his own. Next year the flock will be rotated to another boy in the Chapter. Dick Brown is the Vocational Agriculture instructor. Picture supplied by Bert Brown.

How often has your State been represented with an article or picture in the Magazine during the year? Perhaps the story you have to tell will help to keep your State's program in the news.

If you are concerned about the agriculture teacher's "Work-load," then consider—

Pruning and grafting the program of vocational agriculture

NORMAN K. HOOVER, Teacher Education, The Pennsylvania State University

Norman K. Hoover

AS subject-matter specialist in agricultural education and as a former teacher of agriculture, I can state definitely that there is need for "pruning" in the programs of many teachers of agriculture. "Work-loads" have been of increasing concern to teachers, sympathetic school administrators, teacher-trainers, and state supervisors in recent years. Much of this concern has resulted because of "grafting" to the program of vocational agriculture during the past 15 to 20 years. The need for "grafting" fits into this discussion but can be treated only after some "pruning" has been done.

Since the terms pruning and grafting have been applied to the program of vocational agriculture, we might as well carry the analogy a little farther. As new growth occurs or grafting is applied to a fruit tree, pruning also must be accomplished. Diseased wood, some old wood, and some new wood must be removed, always after careful consideration has been given to its contribution in the total tree. This pruning should be an annual process. In fact, pruning stimulates new growth.

As farming methods, economic conditions, and social conditions change, there should be a certain amount of "grafting" or changing in the program of vocational agriculture. At the same time there should be some wise pruning. This, however, in many instances, has not taken place. Vocational education in agriculture has done much "grafting" to the program, and, in doing so, has done a good job of keeping abreast with a changing agricultural economy. The "grafting" has been commendable; the pruning has been sadly neglected.

The Grafting Process

Twenty to thirty years ago vocational agriculture was taught on a "subject" basis. The required 90 minutes per week for shop work was considered the maximum time for farm shop. The minimum requirements for a home project were considered the goal or optimum. Visitations to the home farm were chiefly during the summer months. Club work—FFA—was in its infancy. With this type of program it was quite natural that much time was spent on the agricultural production and on farm management, rural law, and rural sociology. Many of these subjects were taught much as they were, and are now, presented in the agricultural college or university classes.

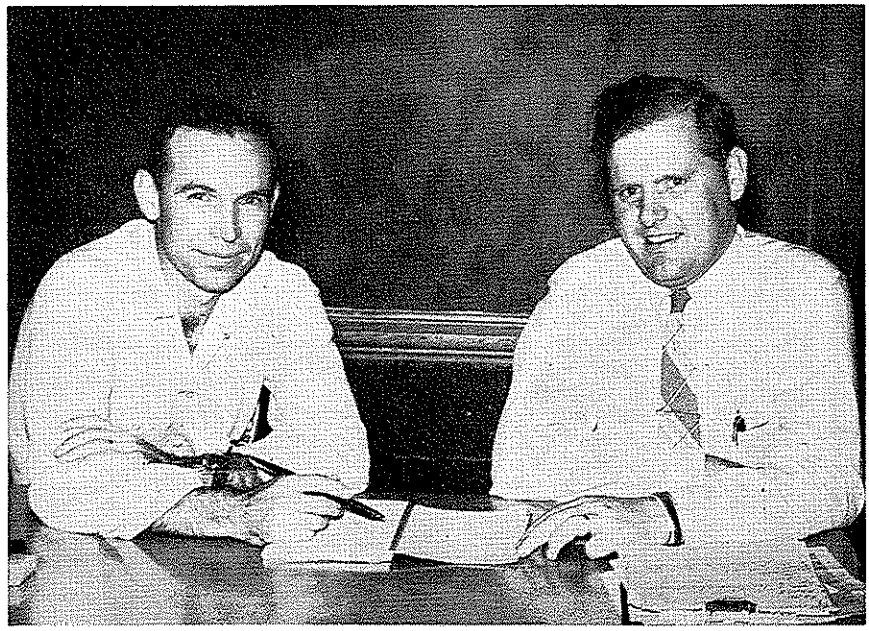
But the program in vocational agriculture has changed. This change has been brought about largely because leaders in the field have learned the value of having the work in vocational agriculture meet the needs of the students in terms of their own home farms and communities. This has resulted in added emphasis on the farming program of the student, the rapid growth of the FFA, and a greatly-expanded farm-shop program necessitated by the mechanization of farming. Broad areas of activity have been added. These include, just to mention a few, soil and water conservation, wildlife conservation, leadership training, rural electrification, farm machinery, farm buildings, and development of a favorable environment for family and community living.

Opportunities for Pruning

While all these additions to the program were being made, no one "officially" did any pruning. The usual run of text and reference books, containing much information irrelevant to the specific needs of the students and the agricultural communities in which they lived, remained in vogue. Many successful teachers, however, began to prune their programs early. Others have not done so; therefore, they feel burdened with "heavy loads." There is so much material to be "covered." They fail to realize that as growth takes place, pruning also must be done. Otherwise the program becomes weighted down with old and unproductive wood—yes, even "dead wood!"

Much of the time spent in formal teaching of rural sociology, rural law, and farm management is wasted. Unless certain phases of this work can be definitely and directly tied in with a boy's activities on his home farm, they will be meaningless to him. Much re-

(Continued on Page 184)



THE SMITH-HUGHES BOYS

Back in 1917 a pair of Southern legislators, both from Georgia, proposed a bill for federal aid for vocational education: agriculture, home economics and industrial arts. They were Senator Hoke Smith and Congressman Dudley Mays Hughes.

The Smith-Hughes bill carried despite violent cries of invasion of states rights and socialism since the proposed grants in aid were accompanied by federal supervision.

There's an unusual situation in Unit 27, which includes Chapin, Concord and Arenzville, Illinois. James T. Smith, left, has been the agriculture instructor at Arenzville since 1952. The new instructor at Chapin is John L. Hughes. Hughes followed Clarence Stark who left Chapin to resume teaching at Jacksonville high school.

Hughes is a graduate of the U. of Missouri College of Agriculture, class of 1946. He received his master's degree there in 1952. Before coming to Morgan County he taught at Licking, Ash Grove, West Plains and Southwest City, Mo. He married a Columbia, Mo., girl and they are the parents of David, 7, and Diana, 3.

Smith completed his master's work at the University of Illinois last summer.

The Smith-Hughes team is planning a full program that includes the teaching of 50 high school boys, veteran training and adult classes during the winter months.

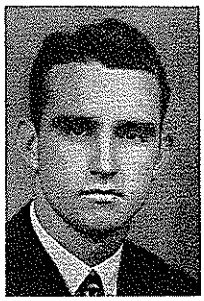
(From the *Journal Courier,* Jacksonville, Illinois.)

A Definite Need—

Individual-problem days in teaching vocational agriculture

How Meet the Need?

HAROLD R. BINKLEY, Teacher Education, University of Kentucky



Harold R. Binkley

THERE is a definite place for the use of individual problems in teaching vocational agriculture in the high school. Each student may have problems that are different from those of other students; he may have problems that are not common to the group. In vocational agriculture most of these problems grow out of the farming programs of students. Setting aside regular days on which each student may work on a problem or problems of his choice saves time for the teacher and helps prevent "dragging in" problems before the group that are not of common interest.

Many teachers have *individual-problem days* and make good use of them. Making good use of individual-problem days requires careful planning. There is no doubt but that planning for individual-problem days requires more careful planning than for group teaching. The teacher's role is still that of teacher. If the teacher is to succeed in using individual problems in teaching, he and the boys must get into the spirit of it. There must be problems to solve on the individual-problem days. Many teachers have time set aside in their courses of study for such purpose. However, some teachers have had difficulty in developing a workable plan for making the best use of these days.

Need for Getting Farming Programs Planned Early in the School Year

Sophomores, juniors, and seniors should plan the bulk of their farming programs early in the school year. (Freshmen should have the bulk of their programs planned by the end of the first semester.) Getting the farming programs of the upper classes planned the first 6 to 8 weeks after school starts lays an excellent foundation for many individual problems throughout the year. Not until the boys have farming programs planned will they have very many individual problems—out of the planned projects will grow problems for individual study and solution.

A Suggested Procedure

Soon after a class has completed planning the bulk of their projects (productive and improvement), the teacher should guide the boys to block out much of their individual-problem work for the year. Perhaps, at the start it would be well to let the class know what is to be dealt with in the course of study for the year. It would be well to put this on the board and explain it to the class. Take, for example, Agriculture II, which might look something like the following:

Livestock:	*Days*
General	5
Feeding	25
Dairy	28
Poultry	9
Supervised farming	30
Individual problems	28
Farm mechanics	32
FFA	9

After this has been put on the board and discussed, lead the class to name other enterprises and improvement-project areas *in which they have projects planned,* that will not be discussed in class as a group this year. It would be well to list these on the board also. Once these two lists are on the board, the teacher can guide the class to see that group time will be spent on only two productive enterprises—dairy and poultry—and that 28 days are set aside for them to work on individual problems, most of which will be on the improved practices in the other projects in their farming programs.

At this point, it would be well to take one enterprise, say sheep, in which three or four boys will have projects, and guide the class to list the improved practices they will need to carry out well if they are to succeed with sheep. After the improved practices are written on the board, list at the right of each practice the month it should be carried out. The block-out might look something like this:

Sheep Improved Practice	*Month to be Carried Out*
1. Selecting breeding ewes	July
2. Selecting rams	July
3. Breeding	August
4. Feeding bred ewes during winter	November
5. Preparing quarters for lambing	December
6. Saving the lambs	January
7. Caring for ewes and lambs after lambing	January
8. Feeding ewes and lambs	January
9. Docking	January
10. Castrating	January
11. Shearing and caring for wool	May
12. Controlling parasites	March

(Continued on Page 183)

INDIVIDUAL-PROBLEM WORK SHEET

Name John Doe For the year beginning September 1954

Project Sheep Year in vocational agriculture 2

Improved Practice	Monthly Calendar of Improved Practices											
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Selecting breeding ewes										☒	■	
Selecting rams										☒	■	
Breeding											☒	■
Feeding bred ewes during winter		☒	■									
Preparing quarters for lambing			☒	■								
Saving the lambs				☒	■							
Caring for ewe and lamb after lambing				☒	■							
Feeding ewes and lambs				☒	■							
Docking				☒	■							
Castrating				☒	■							
Shearing and caring for wool								☒	■			
Controlling parasites	☒	■	Stomach Worms					☒	■	Maggots, ticks, and lic		
Controlling diseases			☒	■								
Providing pastures				☒	■							
Marketing								☒	■			

Key: Month to be done ■; month to be studied and planned ☒. After the months have been decided on for study and planning, the improved practices should be listed on the individual-problem day block-out sheet in the student's Vocational Agriculture Notebook.

Many administrative difficulties result from lack of understanding

Improving Vo-Ag and school administration relationships

Offers some solution

A. W. JOHNSON, State Supervisor, Montana

VO-AG folks, over the country here, have decided to do something about improving and maintaining good school administrative relationships. The school administration includes the superintendent, the principal, the board of education and the faculty. Some positive ways and means by which a local teacher of vocational agriculture might help develop a better understanding and a more favorable attitude toward vocational agriculture by the school administration are as follows:

Help the administration secure all possible information about Vocational Education.

Help administrators, by working together, to understand the purposes of Vocational Education.

Urge administrators to attend FFA conventions—district, state, national.

Urge administrators to encourage local board members to attend vocational conferences, conventions and visit local classes and Chapter meetings, and take part in department tours.

Urge administrators to attend Vocational Education conferences.

Urge administrators to ask for a course in the philosophy, fundamentals and purposes of Vocational Education as a part of their college or university educational program.

Urge administrators to attend and observe Vocational Education classes in the local high school frequently.

Urge administrators to attend tours and FFA Chapter meetings.

Urge administrators to take the proper initiative in setting up Vocational Education advisory committees—use of resource people.

Urge administrators to use the guidance program to determine student interests and needs for Vocational Education courses.

Urge administrators to take the initiative in conducting community surveys to determine the high school curriculum needs of the people of the community.

Urge administrators to lead the way in making Vocational Education courses a part of the total high school program.

Urge administrators to take the lead in determining out-of-school Vocational Education courses.

Urge administrators to recognize and understand the need for Vocational Education standards. (Class time, farming programs, etc.)

Urge administrators to work closely with instructors in developing and carrying out a summer program.

Urge administrators to use State staff members and teacher trainers as consultants.

Help administrators to understand the need and purpose of two to three weeks in-service training summer school programs at the college for teachers every three years, and one and two day off campus workshops conducted by State staff members and teacher trainers.

Help administrators to understand the function of the teacher training department and its curriculum.

Help administrators to know about and understand the State Course of Study of the several Vocational Education services.

A close working relationship between administration and Vocational Education Educators is a two way street. Good understandings and appreciations of the work being done by a local Vocational Agriculture Department is the result of a real effort. A good Vo-Ag program may exist and still be unappreciated. □

Individual Problem Days - -

(Continued from Page 182)

13. Controlling diseases .....December
14. Providing pastures .....February
15. Marketing .....May

Once this is on the board, the teacher might ask the class this question: when should these boys study and find out, "How to prepare the quarters for lambing?" The answer should be known well ahead of lambing time in order for the boys to put the quarters into good shape before lambing starts—in December.

The teacher should give each boy a copy of the INDIVIDUAL-PROBLEM WORK SHEET (see page 182). Have each boy select one of his projects other than dairy and poultry and list the key improved practices in the appropriate column on the work sheet. Of course, the teacher will need to supply help and references for this. Following the listing of the practices, each student, with teacher help and appropriate references, should block in the month each practice should be carried out, followed by "X-ing" in the month to be studied and planned. (See key at bottom of INDIVIDUAL-PROBLEM WORK SHEET.) After the months have been decided upon for study and planning, the improved practices should be listed in the student's Vocational Agriculture Notebook. Each boy will want to work out one of these sheets for each of the projects that he has in his farming program this year that are not to be dealt with in group work. After completing each work sheet, the students will want to transfer the information to their Vocational Agriculture Notebooks.

The procedure just outlined will take two to three days. However, the time spent, if well planned and the plan carefully executed, should be very interesting and meaningful to the boys. It should enable the teacher and the boys to build a sound foundation for individual-problem days for the year. Likewise, the problems will have seasonal importance from the standpoint of the boys' studying the improved practices just prior to the time they will be carrying them out. Throughout this planning, the teacher should cause the boys to feel that these individual-problem days will be very interesting and beneficial to them in doing a good job with their farming programs.

Other Individual Problems to Be Added

Students will discover and add other individual problems to this list. Having done this initial blocking out of individual problems, students will be keener in discovering individual problems growing out of classroom problems, they will be keener in discovering problems in their home-farm situation, and the teacher will be in better position to guide the students to discover problems on supervisory visits and elsewhere.

Frequency of Individual Problem Days

If all students write down the problems they wish to work on, as outlined here, no student should be without a problem when an individual-problem day arrives. These days should be frequent and regular enough so that interest in solving individual problems is maintained. To the extent that the students have individual problems to work on, the teacher will need to set aside days for such work. As farming programs of students increase in scope and number of projects, additional days will be needed for solving individual problems.

Students Need to Arrive at Definite Conclusions

The teacher should check the individual problems to see that they are neither too difficult nor too easy. Likewise, he must check the conclusions arrived at by the students. Students need to form the habit of arriving at good, sound, usable conclusions to their individual problems. If the individual problem calls for a "descision," the student should come out with a sound decision and be able to back it up. If the problem calls for "how" to do something, the conclusion should spell out the steps clearly and definitely. In most cases, the conclusions to individual problems should be written on scrap paper and checked by the teacher before the students record them in their Vocational Agriculture Notebook or in their project plans. □

Is the non-farm boy who develops his individual farming program around responsibilities undertaken through opportunities provided by a cooperating farmer getting his fair share of recognition? What are his chances of attaining advanced FFA degrees?

Administration is improved by—

Cooperation and coordination through conversation

ELWOOD M. JUERGENSON, Teacher Education,
University of California

E. M. Juergenson

"WILL you see Stan? I'll call the superintendent and get the coffee." Doesn't sound like Vo-Ag (or does it?), but it's the gong to start another coordination session among the several Vo-Ag departments that exist in one community.

We realize many, if not a majority, of the troubles between Vo-Ag teacher and administrator, farm advisor, or what-not exist primarily because of a lack of understanding of each other's viewpoint. Often times if misunderstandings do arise they can be smoothed out by simply getting together where each can present his side of an issue and reach some degree of common understanding.

More desirable than this would be a preplanning session that might anticipate areas of friction and work out settlements before problems arise. In addition, common objectives, areas of overlapping, proper channels of communication, common use of equipment, and so on can be thought out clearly and to the satisfaction and mutual progress of each participant.

In a one-man rural community Ag department so typical of Vo-Ag in its infancy, problems of misunderstanding arose. How much more significant today with multi-man departments, multi-department communities and an expanding and widening viewpoint as to the objectives and scope of Vo-Ag is it to have complete understanding and coordination throughout a community if the best interests of vocational education are to be realized.

An Illustration

The opening paragraph of this article is a reasonable reenactment of an actual conversation which initiated one of the periodic conferences between the teachers of Vo-Ag of three different departments which exist within the city limits of one town.

Modesto, California, is an average sized valley town with a population of nearly 70,000. It is in the center of a rich agricultural area growing a large variety of agricultural products.

Several years ago the single high school became so crowded it was divided and another school unit built. Two independent multi-man Vo-Ag departments were set up. Each department has three teachers, both operating under a single school board. In addition a fine junior college exists which has included in its curriculum, Vo-Ag through the 14th grade. The junior college agricultural department employs six Vo-Ag teachers to handle its program. A unique situation exists in that both high schools tend to send their graduates to the junior college; thus the Young Farmer program is centered here.

A coordinating planning meeting. Here the heads of three Vocational Agriculture Departments in one California city meet to discuss their problems at a "friendly hour." Left to right: Gael Kauffman, Modesto High School; Harold Stanley, Downey High School; Robert Elliott, Assistant Superintendent, Modesto City Schools; Ernest Tarone, Modesto Junior College.

It is easy to imagine the mutiplicity of problems that could originate in such a situation. On the other hand the simple straightforward cooperation and planning that is being done is responsible for the whole, operating as a unit, and for the best interests of the community.

Every three weeks after the school day is over the heads of each department meet together, often with a representative from administration or the state department of education. The meeting place is a small conference room adjacent to the cafeteria so that problems may be freely discussed over the friendly atmosphere of a "coffee break." Each participant comes prepared to relate to the group significant items occurring in his own individual department and to obtain cooperative thinking in directing future action back in his immediate department. Prior to coming he discusses items with members of his staff, and most important, informs them as to what transpired at the meeting upon his return. Several problems, date conflicts, and so on may be talked over, or at times only a single major issue discussed. The absence of a real formal agenda, minutes, motions and the informality tend to promote good will and mutual consideration of each other's situation.

Variety of Problems

As an example at one recent meeting these items were brought forward:

1. Which teacher should represent the school at the AVA convention in San Francisco, the best day to do so and how to meet expenses.
2. The feasibility of buying a cooperative livestock scale and the best type to get.
3. What part should the Vo-Ag teachers play in the forthcoming bond election.
4. How could one school's farm shop best be renovated.

At this particular meeting in addition to the three heads of Vo-Ag departments, the Assistant Superintendent of Schools was present to represent administration. Future meetings may have the regional or area supervisor, teacher trainer, farm advisor, or others in attendance depending upon what phase of the program is to be considered. Each man contributes, but generally no written account is kept once general agreement is reached.

The effects of such planning are apparent in this community and a degree of coordination between departments and administration is obtained that is more lasting and effective than could be obtained by any other means.

Here is proof that friendly planning, done in advance, with all those informed who should be, pays dividends toward an improved program of vocational agriculture. □

Pruning and Grafting - -

(Continued from Page 181)

organization could take place in the production courses also. A teacher asks, "How will I get time to teach *Dairy Cattle Pedigree Evaluation*?" The answer is "Spend less time on the history of the breeds." The evaluation of pedigrees is a problem confronting the student very early in his work with the dairy enterprise, whereas, his interest in the history of the breed of his choice will develop naturally as he grows into dairy farming. This example, of course, implies that the boy has a reason for studying the dairy enterprise in the first place.

To make room for new activities and lessons required by a changing concept of the worth of the individual student, a teacher of agriculture will have to give up some of his pet ideas. He might have to reduce the mechanical drawing considerably; he will have to discontinue testing seed corn by the "rag-doll" method; he probably will not need to spend as much time on caponizing. Then, too, he will have to learn some new skills and techniques.

By pruning the program in vocational agriculture to a bare framework of "common ground units" and then adding to the program only in terms of individual student's needs, the work-load of many teachers will be reduced, many non-essentials will be deleted, and a satisfactory program can be worked out. □

Administration of Vo-Ag programs is facilitated by taking advantage of—

Opportunities through activities in the eighth grade

B. W. BARNES, Critic Teacher in Agriculture, West Virginia State College

B. W. Barnes

IT is generally accepted that the teacher of vocational agriculture is a very busy man. His workday is long, covering in many instances his all-day program, adult program, young-farmer program, and leadership activities. The idea of recommending more work may be met with little or no enthusiasm. However, a little more work sometimes makes the work already in progress more effective.

Through the organized activities of an eighth grade class, the writer is finding new approaches and solutions to his vocational agriculture problems. The work in the eighth grade may pave the way for some outstanding vocational agriculture work in later years.

Where the opportunity permits and the situation appears feasible, an eighth grade class in elementary agriculture should be organized. This class may enroll boys and girls who are members of farm families or urban families. The course content should be of an exploratory nature, serving as an introduction to the vocational agriculture total program and acquainting non-farm pupils with first-hand contact and information about plants and animals. Pupils who expect to major in the sciences and related fields will find the general agriculture program quite helpful.

Generally, eighth grade students are not expected to become active in New Farmers of America and Future Farmers of America Chapters. However, leadership experiences in organizational functions, committee work, parliamentary procedures, public speaking, and cooperative and community projects can be provided in cooperation with the Chapter program. This gives the adviser an opportunity to observe potential student leaders and provide such guidance and leadership as he is able to manifest for the prospective vocational agriculture pupils.

Planning Is Necessary

The writer feels that one of the major phases of an eighth grade agricultural program is a community survey of prospective vocational agriculture pupils who may enroll in the eighth grade introductory course. The teacher would want to know the farming facilities and possibilities of an anticipated pupil and his interest in agriculture. This course will give him the opportunity to acquaint himself with this status of the pupils.

Before the eighth grade program is launched, the objectives should be carefully determined, outlined, and presented to the principal and superintendent for approval. It will be well to explain the program to the local PTA and individual parents. The program will present some problems which should be carefully analyzed. The matter of scheduling is important. The amount of class time to be allocated and the credit to be allowed must be determined.

The objectives of the eighth grade course in agriculture are many, and they vary in purpose according to the department, local school conditions, and intent of the teacher of agriculture. The writer would not dare to say what the objective should be for any eighth grade program. What is taught in each case will be determined by what the teacher has set out to achieve. However, there are some activities that should be followed if the course is to be an exploratory one for prospective vocational agriculture pupils.

Introductory Function

The major enterprises in agriculture should be studied by eighth grade pupils. Their scope and importance as an industry should be carefully defined. The human interest, labor, and capital necessary to begin in these enterprises should be pointed out along with the expected income. A comparative study of enterprises will indicate the type of agriculture one should consider as an occupation.

Vocational Agriculture has a program that varies from other programs in the agricultural field. For the benefit of anticipated vocational agriculture pupils, vocational agriculture should be clearly defined, giving the qualifications for enrollment, details of a good supervised farming program, and the keeping of the record book.

Field trips to outstanding supervised farming programs in the community and the sponsoring of class projects centered around the enterprises taught will constitute excellent teaching devices if the pupils are allowed to plan and follow them through to completion. If it is convenient, tours to the college and experimental farm will give first-hand information on the trends in modern improved farm practices.

The following is an outline of course work and activities organized by the writer in the Teacher-Training High School, West Virginia State College, Institute, West Virginia:

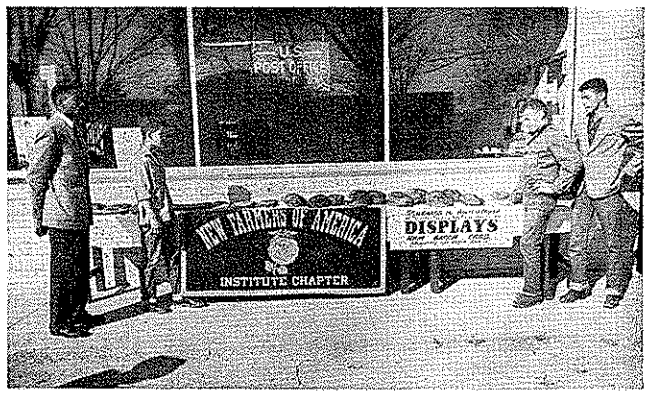
Outline of Instruction for the Eighth Grade

First Semester

Problem	*Number of Lessons*	*Month*
1. What Is Agriculture? a. Scope b. Importance as an Industry c. Definition	5	Sept.
2. What Is Vocational Agriculture? a. Definition b. Qualification for enrollment c. Supervising farming activities d. Record books	5	Sept.
3. NFA Organization a. Creed—History b. NFA purposes c. Membership and degrees d. Ceremonies e. Sections and states	5	Oct.

(Continued on Page 187)

Eighth grade pupils in General Agriculture course, Teacher Training High School, W. Va. State College, Institute are getting first hand information in planning and planting the family vegetable garden as an orientation to their Vo-Ag program.



Eighth grade pupils at Teacher Training High School, W. Va. State College, assist local NFA Chapter in Ham, Bacon, and Egg Show. Left to right: Frank Wilson, teacher-trainee in agriculture; Michael Jeffries, 8th grade; David and Donald Lipscomb, 10th grade.

Technical skills in vegetable growing

Needed by teachers of vocational agriculture

JESSE A. TAFT, Eeacher Education, University of Massachusetts

Jesse A. Taft

THIS report is the third in a series dealing with technical skills needed by teachers. Previous articles dealt with purpose and procedure used in the study and its application in technical skills needed in livestock instruction. This part deals specifically with sixty-three skills in teaching vegetable growing.

Lists of the vegetable growing skills were sent for checking to a random sample of 227 teachers, approximately one-fifth of those in the North Atlantic region. Of those, 78 or 34.3 per cent, were checked and returned. Replies were well distributed over the North Atlantic Region, all states being represented in the study. Experience of teachers who replied in the field of vegetable growing ranged from less than one year to 32 years. Over three-fifths (61.5 percent) were teachers having experience ranging in amount between 5 and 20 years.

General Nature and Treatment of Returns

The sixty-three skills have been retained in nine groups as originally compiled for the check-lists. The skills are grouped into major operations in vegetable growing and arranged in a logical seasonal sequence for a vegetable enterprise. Table 1 shows the number of teachers who used each skill, the value placed upon each skill, and where teachers received sufficient training to demonstrate each skill with competence. In the comparison of groups each group of related skills was ranked by dividing the number of skills within a group into the total number of checks in the "used" column. Rankings in the summary which involve the number of "high value" ratings given by the teachers to the skills within the group were obtained in a similar manner to that of determining the average number of teachers using the skills; that is by dividing the number of skills within a group into the total number of "high value" checked for all skills in the same group. For reason of simplification, percentage figures were intentionally omitted from the accompanying table.

Readers are cautioned against using the order of listing as anything more than an approximate order of importance in teaching, as value ratings which teachers gave skills would influence such an order.

Where Teachers Received Their Training

Before an employed teacher could indicate with accuracy where training in vegetable skills was received, it was necessary for him to understand the meaning of technical skills. For the purpose of this study, technical skills were defined as "farm skills on a *doing level,* the learning of which depends on a planned demonstration."

The study pointed out that the important source of training received by teachers in vegetable skills took place on the farm before entering the teaching profession. Training on the job as a teacher ranked second in importance followed closely by training in college. The low amount of training in skills received in vocational agriculture probably is due largely to the fact that many of the teachers did not take vocational agriculture in high school.

Comparison of the Groups of Skills

Close examination of Table 1 reveals many differences in the use of individual skills, the value and where teachers received their training. Many teachers found it difficult to designate one place where the skill was learned since often times all four places contributed to learning; namely, on the farm, in vocational agriculture classes, in college, and on the job.

In the following discussion each group of skills representing a significant area of vegetable growing is presented in the order of the importance of skills within the group as used by all teachers reporting.

Skills related to SELECTING SITES (3) ranked first in use by teachers. All skills in the group were used by almost 90 per cent or more of the teachers which indicated the importance of this group. Teachers rated this group the highest in value of any group—73.3 per cent average. All teachers rated these skills either high or medium in value with one exception.

FIELD PLANTING skills (25) ranked second to the skills used in SELECTING SITES. An average of 73.3 per cent of the teachers used these skills which emphasizes their importance.

HARVESTING skills ranked third, with an average of 72 per cent of the instructors teaching them by demonstrations. Sixty per cent of the teachers rated HARVESTING skills as high in "Value."

IDENTIFYING skills ranked fourth with an average of 68.9 per cent of the teachers using them. More teachers rated this group of skills as medium in value than any other group. The teachers received their training primarily in college. No other group of skills was learned in college to the extent of IDENTIFYING skills.

CULTURAL PRACTICE skills ranked fifth in use by teachers in spite of the fact that these skills are the core of production. Only about two-thirds (68.9 per cent) of the teachers used these skills. More training was received by the teachers on the farm (32 per cent) for CULTURAL PRACTICE skills than any other group except FIELD PLANTING skills. The group of skills ranked fourth as having high values.

(Continued on Page 187)

TABLE 1. Technical Skills in Vegetable Growing as Checked by 75 Teachers in the North Atlantic Region

VEGETABLE SKILLS	*Number of Teachers Checking*							
	Used	*Value**			*Where Trained*			
		High	*Med.*	*Low*	*On Farm*	*Voc. Agr.*	*Col.*	*On Job*
IDENTIFYING AND SELECTING VEGETABLES								
1. Exhibiting	58	30	25	5	5	11	16	29
2. Identifying types	54	35	23	3	9	7	25	19
3. Judging	43	29	26	4	4	9	26	18
SELECTING SITES								
1. Taking soil samples	73	61	12	1	4	9	40	18
2. Choosing the location	67	55	10	0	22	8	29	11
3. Planning the arrangement of crops	67	49	22	0	12	12	30	17
GROWING TRANSPLANTS								
1. Sowing seed	58	40	20	5	39	3	9	13
2. Transplanting	57	46	15	3	29	5	12	12
3. Preparing seed bed	56	55	7	4	31	6	12	9
4. Hardening off young plants	54	38	21	6	13	7	22	8
5. Treating seed	53	41	15	6	12	9	26	14
6. Watering	50	37	18	6	23	4	11	12
7. Constructing coldframes or hotbeds	45	25	31	5	14	4	14	16
8. Making a compost pile	44	25	26	1	7	1	19	14
9. Mixing soils	38	21	16	15	7	3	18	11
10. Sterilizing soil	37	25	22	10	2	4	23	10
11. Managing coldframes and hotbeds	37	38	13	1	8	6	13	11
12. Constructing sash houses	19	11	14	16	1	2	6	11
13. Managing a green house	14	11	13	5	4	1	5	5
14. Managing a sash house	12	15	10	6	3	0	4	6
FIELD PLANTING								
1. Applying fertilizers	69	68	5	0	43	7	24	16
2. Applying manure and lime	67	52	9	1	31	6	27	9
3. Preparing seed bed	66	62	11	0	47	4	15	9
4. Applying fertilizers by hand	65	47	18	2	42	2	12	13
5. Transplanting by hand	62	51	21	2	43	6	9	19
6. Preparing seed potatoes for planting	56	38	13	6	31	4	11	12
7. Applying fertilizers by machine	44	32	17	0	25	2	8	10
8. Using starter solutions	44	23	21	4	4	3	17	17
9. Using hot kaps	41	15	28	11	13	6	14	10
10. Transplanting by planter	36	26	15	6	14	2	7	17

*Teachers were asked the "Value" of each skill whether they used it or not, hence the "Value" totals are usually more than the "Used" totals.

TABLE I (Continued)

VEGETABLE SKILLS	Number of Teachers Checking							
	Used	*Value**			*Where Trained*			
		High	*Med.*	*Low*	*On Farm*	*Voc. Agr.*	*Col.*	*On Job*
CULTURAL PRACTICES								
1. Controlling pests—hand dusting	70	58	13	0	28	23	10	19
2. Cultivating with hand equipment	65	39	19	6	48	2	6	13
3. Controlling weeds with hand tools	64	38	20	6	49	3	6	9
4. Controlling pests—hand spraying	64	55	6	2	32	8	12	18
5. Controlling weeds with chemicals	62	45	21	3	11	1	17	40
6. Thinning	58	42	16	3	28	4	22	11
7. Controlling pests—power spraying	56	52	6	1	21	2	11	25
8. Practicing sanitation	54	41	16	1	12	6	27	13
9. Mulching	53	26	32	3	15	4	20	18
10. Cultivating with tractor equipment	48	47	18	1	33	4	6	24
11. Controlling pests—power dusting	47	42	12	1	11	4	10	23
12. Controlling weeds with power-drawn cultivators	47	40	16	3	39	3	7	20
13. Staking and pruning	46	23	24	6	20	2	17	14
14. Trellising	27	15	18	9	8	1	12	10
15. Irrigating	14	22	20	5	4	4	18	19
HARVESTING CROPS								
1. Harvesting by hand	70	96	13	2	31	5	15	17
2. Harvesting by machine	38	34	11	3	8	1	11	19
STORING								
1. Storing in below-ground cellars	32	21	26	2	17	2	9	9
2. Storing in dwelling cellars	32	21	35	6	20	5	7	8
3. Storing in pits, trenches, or mounds	31	18	20	7	13	3	9	6
4. Storing under artificial refrigeration	29	18	8	2	1	1	17	10
5. Storing above ground	29	23	15	6	11	3	12	6
PREPARING FOR MARKET								
1. Grading	57	55	9	0	17	5	17	21
2. Bunching and tying	32	29	9	7	11	1	8	7
3. Washing	32	32	7	6	13	1	5	14
4. Packing and pre-packaging	34	33	9	6	9	0	9	17
5. Wrapping	31	29	10	6	7	2	8	15
6. Pre-cooling	19	22	8	8	1	1	7	10
MARKETING								
1. Selling on open market	48	41	9	3	17	5	8	20
2. Loading for market	29	21	17	3	13	2	7	9
3. Selling through commission firms	28	28	12	6	4	2	7	13
4. Selling through cooperatives	24	27	10	3	2	3	15	8
5. Selling on contracting basis	22	28	13	2	1	3	9	12

GROWING TRANSPLANTS ranked sixth in use by teachers. Slightly over one-half (64.6 per cent) of the teachers used these skills. It is significant to note that skills such as constructing and managing sash houses and greenhouses were used by only one-fifth of the teachers. Source of training was equally divided between college and on farm.

PREPARING FOR MARKET skills ranked seventh in use by teachers. Most training in this group of skills was obtained on the job. One skill, "Pre-cooling," was used by only one-quarter of the teachers; yet two-fifths of them ranked it high and medium in value.

STORING skills ranked eighth in use by teachers. Only two-fifths of the teachers taught this group of skills. Approximately the same number rated them high or medium in value. Most training in this group of skills was obtained on the farm.

MARKETING ranked ninth and last in use by teachers. Two-fifths of the teachers taught these skills as demonstrations. Most training in this group was obtained on the job. As to value, more teachers rated them high or medium in importance than the number of teachers using them. This can be interpreted as an area in which the teachers felt incompetent and in need of technical instruction.

Summary

This study shows that the most important groups of skills in vegetable growing, when judged by the number of skills teachers used, are selecting sites, field planting, harvesting, identifying, cultural, growing transplants, preparing for market, storing, marketing. The same relative order of importance was given by teachers to value when high and medium ratings were combined.

Most training for skills was obtained by the teachers through farm experience, followed closely by on-the-job training. Training received in college ranked third in importance as a place where training was received by teachers. Training received in Vo-Ag classes was the least important source.

The list of sixty-three skills are basic vegetable growing skills. However, the nature of the skills change rather frequently and teachers must remain alert to technological developments. *Preparing for market, storing,* and *marketing* comprise sixteen skills, or approximately 25 per cent of the total, in which it appears that teachers are least qualified to teach. It would seem that the importance given today to preparation for the market, storing, and marketing of vegetables warrant special in-service training from college specialists and qualified individuals within the industry.

It is anticipated that college instructors in the field of vegetable growing will find this list helpful in conducting their courses for pre-service and in-service teachers of Vocational Agriculture. Finally, it is hoped that Vo-Ag teachers will welcome these lists and be guided by the Vegetable Skills which teachers in the North Atlantic Region recognize as essential to the industry.

□

Opportunities - -

(Continued from Page 185)

4. Field Trip (Projects in Community) a. Point out things to look for b. The tour c. Summarizing things observed	3	Oct.
5. Field Trip (College Department of Agriculture) a. Piggery b. Dairy c. Poultry d. Greenhouse e. Farm shop	2	Oct.
6. How Plants Grow a. From soil b. From air c. From water	2	Oct.
7. How Animals Grow a. From soil b. From air c. From water	2	Nov.
8. Common Breeds of Swine Found on Average Farm and Their Characteristics a. Hampshire b. Poland China c. Duroc Jersey d. OIC e. Chester White } Lard Type f. Yorkshire g. Tamworth } Bacon Type	6	Nov.
9. Common Breeds of Poultry Found on Average Farm and Their Characteristics a. New Hampshire Red b. Rhode Island Red c. Plymouth Rock d. Barred Rock e. White Rock f. Yellow Buff } Meat Type or Heavy Breed g. Leghorn h. Wyandotte } Egg Purpose Light Breed	6	Nov.
10. Turkey Production a. Breeds b. Brooding c. Feeding and managing	2	Dec.
11. Seed Identification	2	Dec.
12. Entries in Record Book a. Selecting and posting project program b. Estimated budget sheet c. Labor sheet d. Cost sheet e. Returns	3	Jan.
13. Agronomic Classification of Plants a. Cereal b. Forage c. Soiling d. Companion e. Legume f. Catch Crop g. Tuber Crop h. Root Crop i. Oil Crop j. Rubber Crop k. Fiber Crop	2	Jan.
14. Review and Examinations (End of First Semester)	2	Jan.

Second Semester

Problem	*Number of Lessons*	*Month*
1. What to Feed and When to Feed Growing Pigs a. Feeding rations b. Feeding schedules c. Watering—Curing d. Killing—Processing } Class project each year	3	Feb.
2. Housing the Pig Project a. Constructing the pen b. Bedding c. Fencing	3	Feb.
3. Brooding Baby Chicks a. Selecting and securing baby chicks b. Brooder house c. Heating d. Feed and feeding e. Watering f. Ventilation g. Hardening } Class project each year	3	Feb.
4. How and What to Grow in Garden a. Planning or drubbing the land b. Fertilizing c. Selecting and sowing the seed d. Cultivation e. Spraying and dusting	3	Feb.

(Continued on Page 190)

The relationships established have much to do with solving administrative problems

Be a part of your community

FRED TRIPP, Vo-Ag Instructor, Schoharie, New York

Fred Tripp

THE job which an Agricultural Teacher in the rural communities of America may be credited with doing, is often times commensurate with the type of work which he carries on in respect to his Community Relationships. This is often not fully appreciated by some men. In fact many of them find the job uninteresting and leave after a short stay in the field. I suspect that the reason they leave may be because they have not established the good community contact program which breeds a successful program. At least I feel that this is one of the reasons that they leave a school area after a short stay.

The good wife of the Ag teacher may greet him as he enters his home with a message taken over the phone from some group which is seeking his services at a program somewhere in the school district area. "The Master of the Gallupville Grange called just before you came in, and he would like you and the FFA boys to put on the program for two weeks from last night." Well, this sounds like a big task. It sounds especially huge to you at first, for you already have a busy schedule and it appears to you that you might not have the night free. However, you are pleased when the page in your record book shows that night to be free. A return phone call assures the good Master that you will be there.

Results Are Far-Reaching

A program which you feel will justly show off the work of your Department and at the same time fill the needs of the Grange folk is the one which you plan. It will prove a just reward for you when it is completed. Perhaps the program has more than its feature content. Here the Ag teacher is able to renew old acquaintances and at the same time make some new ones. Some of the people contacted will not be parents or even farmers. However, they will represent some of the best boosters for an Agricultural program in the community. Many times they will be the conversational type, and the program will be discussed over many of the dinner and bridge tables of the homes.

In New York State we have a most healthy working relationship in the communities with the County Agents and members of their staffs. Farm Bureau committeemen are numerous among the Vo-Ag men. Here is a chance to contact persons in the community who otherwise would not be met in the course of the daily activities. Farm Bureau meetings are many during the year, and the out-of-school group and FFA boys enjoy these meetings. College specialists often say the same things which Vo-Ag teachers say, but they say it in a different way. Even so, the meetings present an opportunity for the Vo-Ag teacher to make community contacts.

During the Summer program of the local Agricultural Instructor there are many calls to homes of normally non-serviced families. These might include calls to many residents of the district to test soil, tissue-test plants, identify insects, and lay out a spray or dust control program for the vegetable or flower garden. These people recognize the Vo-Ag teacher as a potential source of information. The job is there to be done. The need for help can be met most justly by the trained man in the community; this is the Vo-Ag teacher. To neglect or ignore persons in your community is to commit occupational suicide. The new teacher may feel ill at ease in serving these needs, however, he will soon find that they pay off. Many of these calls will come from the housewives of the community. They have great respect for helpful information. In fact it has been the pleasure of the writer to have adult classes solely for the ladies of the community on vegetable and fruit gardening, and the information provided in that type of class has been more observed in operation often times than information passed out in the all-day group.

Adult programs provide an excellent outlet for the building of better community relations. These meetings may run for varying lengths of time in the school shop or Agricultural classroom. However, the job does not stop there. These people should have follow-up visits also. These visits are very often enlightening to the Vo-Ag teacher, also. I wonder how many of the men who are truthful with themselves could honestly say that they have not learned much from the visits to the members of their adult classes? These are many times operational techniques which are helpful to others in the community. And, the Vo-Ag teacher can certainly serve a useful purpose in his area by being a courier of excellent helpful information. One farmer's problem can often be solved by another farmer's every day practice.

It has often occurred to me that when there is an active program in a community carried out by the Vo-Ag teacher others should know about it. The local newspaper is an outlet available for the travel of such news. A local editor sometimes may have to be conditioned to the program himself. If this job is well done, the community relations program of the Ag teacher can be helped greatly. I feel that the local editor should constantly be kept in contact with the Agricultural program. In fact after having been in this community some nine years, I am called weekly by the local editor if I haven't already given him the information which he feels that his readers would like. To the young men just entering teaching and even to some of those long in the field I would recommend that this practice be instituted or continued without hesitation. This certainly helps in making the Vo-Ag teacher a part of his community. It has been my fortune to have a weekly continuous column on a vegetable gardening feature and others from time to time, and the rewards have been many in bettering community relations.

Local surveys provide a great opportunity to meet and talk with persons not normally contacted. Often times stops for information at a particular farm or rural non-farm residence take much longer than anticipated. Discussion in general concerning the school or the Agricultural program makes the long stay more than justified. I might hasten to say here that the major responsibility of the Vo-Ag teacher lies with his daily and out of school people. But, the rural non-farm folks often have needs and their interest is high. Persons who come from an urban area into a rural area are often in need of much help. Here is a responsive group who will carry out practices recommended to the letter. They soon become some of the teacher's best boosters. Don't neglect this group. This local survey helps to dictate the course of study, but it pours enlightenment by the bushel on a teacher's background for teaching effectively in his community.

There are many activities which a teacher might consider important within his scope of every day paid-for activities. I have mentioned many, and more could be cited. However, I would like to mention some worthwhile activities in building better community relationships which might not be considered exactly work-like in nature. Among these I could enumerate: membership in the local lodges, active participation in a local church, active work in the PTA, workman-like activity in the Kiwanis or Rotary or other service club, and participation in some form of recreational group. This list might sound overwhelming. Some would say that it is impossible to keep up with all of these activities. I contend that a Vo-Ag teacher does not work in a community and live within himself, but he works for the best interest of all in the community and lives with the people of the community. To do this job well and to feel a part of that community in which he lives and at the same time improve his community relationships he must devote a part of his time to this list of activities. I can remember many times hearing that "if a job is given to a busy man it will be done and done well."

(Continued on Page 189)

"Get what it takes"

To do the job in the agricultural shop

STEPHEN JAMBA, Vo-Ag Instructor, New Berlin, New York

Stephen Jamba

ONE of the big headaches for the Agricultural teacher each spring is to decide what equipment and supplies will be needed for the shop classes each year. Should he stock up on all sizes of bolts, screws and nails? Should he obtain various sizes and shapes of sheet iron? Should he purchase a new circular saw?

These are just a few of the questions which confront the teacher at requisition time. The answer to this problem will not be the same for each shop situation since there are a number of factors to consider and each shop has its individual differences in these factors. A few of these factors are:

1. What is the student enrollment in each class using the shop?
2. What type of instruction is taught in the shop?
3. Does the Agricultural teacher handle the junior high school shop program?
4. What facilities already exist in the shop?
5. Do students purchase the supplies they use or does the school furnish these items?
6. What are the facilities for purchasing supplies on short notice locally?

Other Considerations

Consideration of these factors, however, does not solve all the problems encountered in making the requisition for any one year. A few suggestions which relate to the above factors regarding the purchase of supplies and equipment may be helpful and are as follows:

1. First (especially for a new teacher in the department) check school policy regarding requisitioning of material for the department. Also it may be advisable to check with the administration to find out approximately how much money will be available for that year in your particular department. This will give you a guide as to the amount of supplies and equipment that may be purchased.
2. Draw up a list of jobs that are being done or will be done in the shop during the next year, realizing of course that some jobs will only be anticipated.
3. From the list of jobs make a list of the number of tools and the amount of supplies that will be needed to do these various jobs. Also consider when making up this list the number of students that will be doing each job either at the same time or at different times.
4. With the above list of tools and supplies indicate the tools and supplies that are presently on hand or will be on hand at the close of school (figure low on such supplies). Then determine the tools and supplies that will have to be ordered.
5. After the requisition is made, make a form sheet for your reference during the year indicating the number or numbers of each item ordered and the number or amount used during the year. This will help to determine the needs for the following year.
6. When ordering exhaustible items such as nails, lumber, sheet metal, etc., always obtain a little extra to compensate for waste.
7. As for purchasing tools such as hammers, screwdrivers, saws, etc., obtain an extra item of each to allow for breakage and extra students.
8. Regarding the selection of new equipment or replacing old equipment such as circular saws, drill press, welder, etc., determine the need for that piece of equipment, the condition of an existing tool and the room required to operate the tool. When an old piece of equipment no longer does an accurate job consistently, is broken or badly in need of repairs, it may be advisable to purchase a new one. Often times the teacher may set up a plan whereby the power tools can be replaced after a certain length of time. Staggering the replacement of each tool means that each year or every other year or so some piece of equipment is new. When ordering a new additional tool or piece of equipment adequate room for operation must be considered. Many times a school shop can become overcrowded with tools, leaving no place to work.
9. Some of the small items may not necessarily be purchased by the teacher, in other words money is set aside in the requisition for the material but the students do the actual buying with, of course, the teacher's consent. This will give the students a chance to obtain consumer experience in that they have to know what they want in order that they may obtain the right thing.
10. An annual inventory taken at the beginning and at the end of each school year will prove helpful in determining shop needs.
11. In regard to where to purchase tools and material for the agriculture shop, some schools insist they be obtained locally and some schools purchase all items from large retail concerns at a discount. One suggestion which favors the purchase of material locally is that, if many of the small items at least can be purchased at the neighborhood hardware store, good public relations may be built up between the shop and a local business which serves farm people. Thereby the store may become a friendly medium for a good shop program.

It is hoped that one or more of these ideas may prove helpful because a good shop program in the school depends partly on having the right tools and equipment to work with. The farmer of today is mechanically minded and the training of young farmers for their future shop jobs depends on the experience they had in school with the use of the right and proper tools. The problem of determining the needs and obtaining the right material to work with must be met by the teacher of agriculture. □

Be a Part of - -

(Continued from Page 188)

Certainly any Vo-Ag teacher is busy, but to be well-accepted in his community he must donate some time to these activities in this last-mentioned list. The contacts made in this group will not be of the same type always as those made in his professional work. This, I feel is good. It is good for others to know him, and it is certainly a different type of contact for the teacher. "All work and no play"; we have heard that. I mentioned the recreational outlet on purpose. If the Vo-Ag teacher has no outlet or release from so-called pressure of his work, he becomes less effective as a teacher and as a citizen of his community.

In summary I would like to make an additional point. The Vo-Ag teacher becomes an ambassador for his school. Not only is he a representative of his profession to the farmers of his community, but if he works along the lines of which I have written he becomes an ambassador of his school in general. He should be aware of school policy. He will be questioned concerning it, therefore, he should have intelligent answers concerning it. Some of the most enjoyable activities in which an Ag teacher participates will be those which demand that he travel throughout his community. The more home and farm visits he makes, the more he will be accepted by the people of his community. The contacts in the non-professional area will also build confidence and acquaintances. Teaching Vocational Agriculture can be enjoyable, and better community relationships will help to make it enjoyable. Friendships will be built. This is especially true if a teacher stays in a community long enough. I recently observed a teacher cited by our state association. He had been a member of one community for 24 years. Here was a credit to our profession. He had become truly a part of his community. Live with the people of your community, participate in its activities, and be a part of your community instead of just living there much as a parasite. It will prove very satisfying and the rewards will be many. □

Professional *and* Teaching Aids

AUDIO VISUAL AIDS

Slidefilms. *External Parasites of Swine* (#167); *Electric Motors—Magnetism and the D. C. Motor,* Part I (#412); *Winter Feeding of Dairy Cattle* (#2010). Slidefilm prints of 167, 412, and 2010 are $.60, $.44, and $1.20, respectively, in single-frame and $1.84, $.62, and $1.68, respectively, in double-frame. Prints are available from Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois.

Slidefilm 167 is a complete revision of a previous one under the same title but carrying the number 162. The revision contains 68 frames. Slidefilm 412 is the first in a series of four that will deal with electric motors. It contains 36 frames. Number 2010 is a complete revision of one of the same title previously carrying the number 201. This slidefilm contains 96 frames. All three are in black and white.

Payment should accompany orders totaling less than $5.00 and stamps are acceptable for amounts of $1.00 or less.

An Index of Slidefilms, Colorado A. & M. College, Vocational Education Department, Agricultural Education Division, Fort Collins, Colorado. 1954. Dittoed. 17 pages. Single copies free.

A listing of slidefilms in fourteen major divisions of work in vocational agriculture. The title of the slidefilm, its source, color, group for which designed, year produced, and price or rental charge is given for each slidefilm. Approximately 450 slidefilms are listed.

Evaluation of free farm loan movies, California State Department of Education, Bureau of Agricultural Education, Sacramento, California. Ten pages mimeographed. Limited distribution, single copies to head state supervisors and teacher trainers. An evaluation of some 56 free motion pictures on subjects appropriate to vocational agriculture accompanied by a complete listing of sources.

GENERAL

Missouri Source Units; No. 10. *Farm Management,* 1954; No. 11. *Cooperative Activities,* 1954. 16 p. Printed 8½" x 11". 25 cents each.

The foregoing are resource units for use of instructors in formulating course outlines and in the preparation of teaching plans. Available from Missouri Vocational Agriculture Teachers' Association, 122 Waters Hall, Columbia, Missouri.

Guide for Establishment and Conduct of Local Advisory Committees for Vocational Agricultural Departments, California State Department of Education, Bureau of Agricultural Education, Sacramento, California, 1954. Lithoprint circular, 21 pages. Limited distribution, single copies to head supervisors and teacher trainers. Provides information for school administrators, boards of trustees, teachers of vocational agriculture and committee members on procedures for establishing and for conducting meetings of advisory committees.

School Farm Laboratories in California, California State Department of Education, Bureau of Agricultural Education, Sacramento, California, 1953. Mimeo circular, 30 pages. The objectives, functions, legality, plans and operations of school farm laboratories in the state of California. Limited distribution.

A good Career—teaching Vocational Agriculture, Department of Education, College of Agriculture, University of California, Davis. Printed folder. A career leaflet discussing the advantages and requirements of teaching vocational agriculture as a career. Limited distribution of single copies, free.

Report of the 34th Annual Conference of New Mexico Vocational Agriculture Instructors, Division of Agriculture, State Department of Vocational Education, State College, New Mexico. Limited distribution. 57 pages.

A mimeographed summary of new developments in the following areas; controlling livestock diseases and pests, feeding livestock, feeding dairy cows, feeding beef cattle, feeding poultry, swine feeding, control of crop insects and diseases and improving and maintaining soil fertility. Instructors of vocational agriculture, specialists from the New Mexico A. & M. College, Extension Service and Experiment Station used the work shop procedure in bringing to light new developments in the different areas and adapting them to New Mexico conditions.

Writing Department of Vocational Agriculture News, Louisiana State University, Department of Agricultural Education, Baton Rouge. December, 1953. 11 pages. Single copy free to head teacher trainers and state supervisors.

Gives reasons for publishing news articles and offers suggestions for topics. Explains how to write a news article.

Filing Vo-Ag Records, Louisiana State University, Department of Agricultural Education, Baton Rouge. October, 1953. 13 pages. Single copy free to head teacher trainers and state supervisors. A guide for filing the records of a department of vocational agriculture.

Keeping and Using the Records of the Supervised Farming Program, Louisiana State University, Department of Agricultural Education, Baton Rouge. August, 1953. 22 pages. Single copy free to head teacher trainers and state supervisors.

A suggested teaching guide for teachers in Louisiana. Explains the reasons for keeping records and tells how to keep and use farm records.

Suggestions for a Community Educational Program on Cotton Production, East Texas State Teachers College, Department of Agricultural Education, Commerce. May, 1954. 20 pages. Single copy free to head teacher trainers and state supervisors.

Suggestions for teachers in Texas on an educational program for the production of greater acre yields of cotton.

Opportunities - -

(Continued from Page 187)

5.	Home Improvement and Beautification a. Cleaning the yard b. Transplanting shrubbery c. Planting flowers and arranging flower beds d. Growing grass and mowing the lawn	3	March
6.	Judging Farm Produce a. Corn b. Eggs c. Irish potatoes d. Identifying seeds	3	March
7.	Judging Livestock a. Dairy cattle b. Swine c. Beef cattle d. Poultry	3	March April
8.	Parliamentary Procedure a. Motions b. Amendments c. Voting d. Reports	3	April
9.	Study film "Safety in the Farm Shop"	2	April
10.	Study the Uses of Community Cannery a. Products most commonly canned b. Steps in canning c. Canning project—co-operatively purchase and can at least one project	4	April May
11.	Orchard and Small Fruit Growing a. Pruning b. Spraying and dusting c. Fertilizing d. Classification of fruit	3	May
12.	Review and Examinations (End of Second Semester)	3	May

Seventh grade boys in this school have enrolled in a general shop course. With this in mind, the teacher of agriculture has made no attempt to include an introductory phase of shop work in the eighth grade program. Much thought has been given to it and some plan may develop soon.

In Summary

An eighth grade agricultural course can serve as an exploratory, introductory, and guidance course through which the vocational agriculture teacher can build his vocational agriculture program with good vocational agriculture pupils. At the same time, he can render valuable service to pupils with other science interests. A survey should be made to guide the teacher in this venture and enable him carefully to outline the objectives and procedures which should be explained to everyone concerned. It has been observed that those pupils who enrolled in the eighth grade course were more advanced and familiar with the vocational agriculture program and activities than those who had not enrolled. □

Are we giving sufficient emphasis to prearranged and negotiated farm experiences for our pupils involving parental cooperation? If boys are to get training for farming, such experiences may be more valuable than single enterprises or projects in individual farming programs.

RAISING LIVESTOCK, 2nd. edition, by Deyoe, Ross, and Peters, pp. 540, illustrated, published by McGraw-Hill Book Co., Inc., Price $4.60.

To those who are familiar with the 1st edition of *Raising Livestock,* it will only be necessary to point out that this edition incorporates recent developments in such aspects of livestock production as selecting, improving, feeding, and maintaining health. There are also, of course, up-to-date chapters on housing and equipment, records, marketing, and caring for and handling livestock.

Each chapter is organized around the major activities involved in raising swine, dairy cattle, beef cattle, sheep, goats, horses, and mules. In each case, a general discussion of the basic principles is followed by a detailed treatment for each kind of livestock. The book is well illustrated throughout. Additional readings are indicated through occasional footnotes. The organization is such that discussions of specific topics for the various kinds of livestock are easily located.

This book is intended primarily for students of vocational agriculture. As such, the book is written and organized so that boys can read it easily. The chapter titles indicate a functional approach for ease of use in teaching.

G. P. Deyoe is known for his many writings in the field of Agricultural Education while a member of the teacher education staffs at Michigan State College and the University of Illinois. He was also a member of the Animal Husbandry and Agricultural Education staffs at the Platteville (Wisconsin) State Teachers College.

W. A. Ross has been a farmer, a teacher of vocational agriculture and school superintendent in Colorado, and State Supervisor of Agricultural Education in Wyoming. He was National Executive Secretary of the F.F.A. for thirteen years. Since 1942, he has been consulting editor for the McGraw-Hill Rural Activities Series.

—A.H.K.

SUPPLEMENTAL IRRIGATION FOR EASTERN UNITED STATES, by Harry Rubey, pp. 209, illustrated, published by The Interstate Printers and Publishers, Danville, Illinois. Price $3.00.

The ideas and practice of irrigation are not new, but the concept of supplemental irrigation for areas in which rainfall is "almost" enough has been relatively undeveloped. This book discusses where supplemental irrigation is advisable; how to plan, install, and operate a satisfactory system; and what to expect from it.

The following sample headings indicate the nature of the content: Methods of Applying Water to the Land; Surface Irrigation; Irrigation by Sprinkling; Water Requirements; Water and Fertilizer Team up for Better Yields; Costs and Profits; How to go About Starting Irrigation.

The book is simply and understandably written, and well illustrated. It contains a list of selected and annotated references in the appendix. It should be of value to teachers of vocational agriculture who are in areas where supplemental irrigation is being practiced, and in areas where the possibilities of supplemental irrigation are being explored.

The author, Harry Rubey, is chairman of the Civil Engineering Department of the University of Missouri. He has had considerable experience with irrigation problems both as a consultant on the National Resources Committee and as engineer and manager of West Coast Irrigation Projects.

—A.H.K.

News and Views of the Profession

Vo-Ag "Old-Timers" Honored by CFBF

More than 800 years of service to California agriculture from some 24 Vo-Ag "old-timers" was recognized by the California Farm Bureau at the Federation's 36th annual convention in Long Beach.

Each of the "old-timers" had completed 30 or more years of service to California agriculture.

In presenting the service pins, Farm Bureau President George Wilson said, "It is with pride and humility that the 60,000 farm families of the California Farm Bureau Federation take this opportunity to honor as their guests, Vocational Agriculture personnel who have faithfully devoted their best efforts, often beyond any normal call of duty, in the interests of California agriculture for the past three decades.

"Many of these activities we have carried out together. We rejoice in what we have done and still can do through cooperation. What we do here today is little enough, we wish we could do more."

Bureau of Agricultural Education honorees include: Walter E. Atwood, of Fresno Central Union High School; Carl Beck, California State Polytechnic College; Sam J. Binsacca, Santa Cruz Union High School; H. F. Chappel, Regional Supervisor; Warren Crabtree, Hartnell A. and M.; H. K. Dickson, Superintendent of Agriculture, Kern County Union High School; B. J. Edwards, Vo-Ag teacher at Wasco Union High School; E. W. Everett, Assistant State Supervisor; Harry L. Holmes, Vo-Ag department at Bakersfield for more than 30 years, now retired; Max A. Kipf, retired Special Supervisor; John L. Knight, also of Bakersfield Vo-Ag department for more than 30 years, now retired; M. K. Luther, Regional Supervisor; Olen C. Markwell, Director of Agriculture, Hayward Union High School; Byron J. McMahon, Chief of the Bureau of Agricultural Education; Julian A. McPhee, President, California State Polytechnic College; Howard F. Peters, of Stockton College; S. M. Poulsen, Director of Agriculture, Washington Union High School at Fresno for more than 30 years; R. D. Richardson, Placer College; A. G. Rinn, Regional Supervisor; Karl Robinson of Hayward Union High School; S. S. Sutherland, Teacher Trainer, University of California, College of Agriculture, Davis; J. I. Thompson, retired Bureau Livestock Specialist; and M. T. Thorstensen, Director of Agriculture at Watsonville Union High School.

BILL LONG,
California State Polytechnic College,
San Luis Obispo, Calif.

Making Committee - -

(Continued from Page 179)

5.2 *Do* suggest a calendar of dates for the committee which will take it through to the completion of its activities.

5.3 *Don't* depend upon oral committee reports.

5.4 *Don't* neglect to have progress reports as well as final reports from each committee.

6. *Give Official Encouragement and Praise to Committees*

6.1 *Do* have the chairman call for a report of each active committee at each regular meeting.

6.2 *Do* make sure that appreciation is expressed for effective committee work by the officers and occasionally by the advisor.

6.3 *Don't* fail to recognize all members of a committee as well as the chairman.

7. *Make Sure that Appropriate Action is Taken by the Organization After Committee Recommendations Have Been Made*

7.1 *Do* act promptly on committee recommendations.

7.2 *Don't* bury important committee reports among unimportant details of the record of business meetings.

8. *Dismiss the Committee When Its Work is Done*

8.1 *Do* include an item upon the dismissal of a committee in minutes of the business meeting.

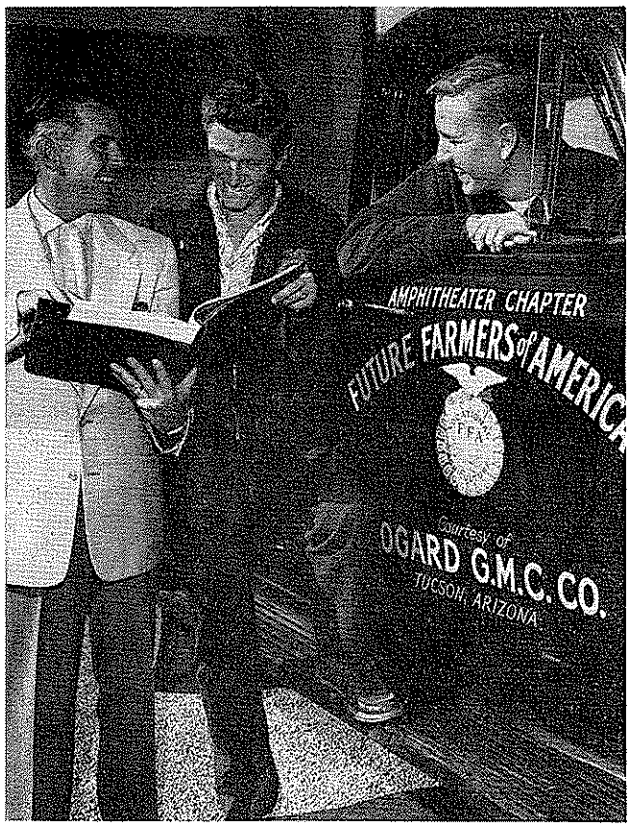
8.2 *Don't* leave the committee in the dark as to whether its responsibility has been fulfilled. □

Subscription Rate Changed

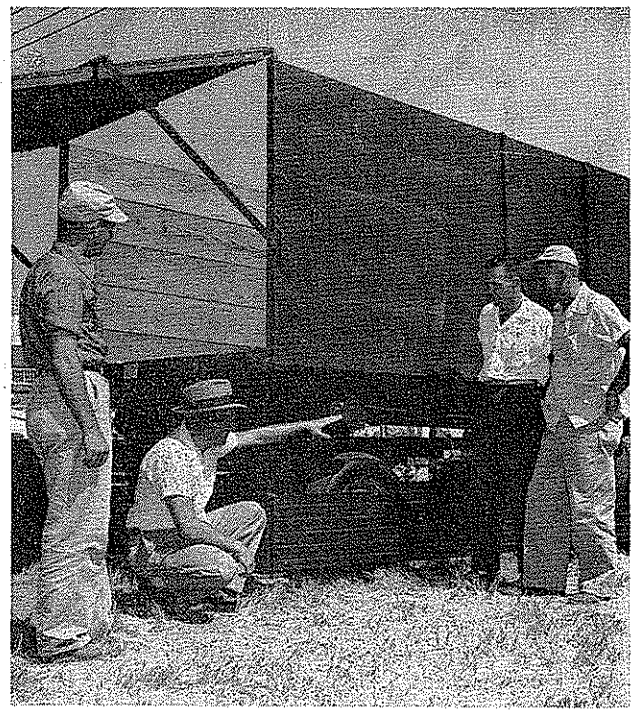
All new and renewal subscriptions for the Magazine will be at the new rate of $2.00 for the twelve issues beginning January 1, 1955. This decision, inevitable in the face of current costs of publication and the loss of special Veterans Teachers' subscriptions, was made by the Editing-Managing Board in its annual meeting at San Francisco last December.

Stories In Pictures

FFA FOUNDATION NATIONAL AWARD WINNERS—Left to right, Donald Sanford, Jr., Jasper, Alabama, Farm Electrification Award; Raymond S. DeHart, Rocky Gap, Virginia, Farm Mechanics Award; Wilbur Lawrence, Ashland, Virginia, Soil and Water Management Award, and Warren Durham, representative of the Fort Pierce, Florida, Chapter for the Farm Safety Award. These national award winners each received a check for $250 from the FFA Foundation.



Another Vo-Ag department and FFA Chapter has increased its facilities for a better program through the cooperation of a local community agency. Shown here is the new truck donated to the Amphitheater Chapter, Tucson, Arizona, by Bogard GMC of Tucson. A truck is made available each year in exchange for the one used the previous year. In the picture from left to right are the representative of the GMC agency, the president of the Chapter and the vice-president. William F. Hendrix is the Vo-Ag instructor and Chapter adviser.



Bill Smith, Vo-Ag instructor, Salina, Kansas, is explaining the details of the construction of a silage wagon to three other Kansas instructors at the State Fair. The Salina FFA Chapter was one of twenty which participated in the FFA Farm Mechanics display at the Fair. (Photo by Harold L. Kugler.)

The Pillager, Minnesota, Vo-Ag department has cooperated with the State Rural Letter Carriers Assn. in its mailbox improvement drive. The department has constructed 77 of the standards shown in the picture. Two students—Mervin Dickson and Loren Bell (holding the post)—are placing one of the improved standards while Martin H. Klingenburg, instructor, supervises the job.

Placerville, California, Vo-Ag department demonstrated a unique use for its shop facilities when it was the host for a regional meeting of Vo-Ag teachers recently. This luncheon meeting suggested to teachers the possibility of using their own farm shop quarters as a meeting place for various community groups. This is the first year that vocational agriculture has been taught in the Placerville school.