Progress in - -

(Continued from Page 179)

A Professional Person Participates in Professional Organizations

A professional person strives to advance the standards of his profession through a contribution to local, state and national associations as well as through his individual practice or service. All teachers should participate in the educational organizations and agencies which are formed to advance the interests of their profession. In vocational agriculture it appears that there is an adequate number of such organizations. We need to perfect those which we have rather than to think in terms of additional organizations.

Teachers need to have a more thorough understanding of the purposes and programs of their organizations; likewise, they need to avail themselves of the opportunity to participate actively in them. Undoubtedly, the National Vocational Agricultural Teachers' Association was formed because other national organizations did not provide ample opportunity for participation in a program which met their specific needs. On a state level, it is desirable to have more and more functioning committees and to increase the scope of activity on a district or regional basis. Teachers could take a good lesson from the FFA insofar as program planning is concerned. Too often our professional organizations do not address themselves to the task of developing challenging and measurable goals, and ways and means to be followed in accomplishing those goals. Programs need to be written and the membership is entitled to know what is being planned and accomplished. This increased activity, which would be desirable, would necessitate larger budgets. Other professional organizations have more adequate budgets than are being provided by teacher associations.

A Professional Person Abides by a Code of Ethics

All professional persons abide by a code of ethics. A basic aspect of such a code gives recognition to rendering service as being the chief purpose of the professional. Such persons are not employed by the hour; neither is close supervision necessary. Professional persons should have the ability and should be trusted to direct themselves, their plans and their activities. It appears that some in our ranks are becoming a bit too conscious of the number of hours that we are spending in teaching vocational agriculture. We should never come to an agreement concerning the number of hours which should be spent each day or each week. This should be left to the judgment of the teacher. He needs, however, to have a thorough understanding and appreciation of the objectives that should be reached in his program and have the ability to plan a course of action to accomplish them. Persons who do not meet such standards should not he certified to serve in the profession.

Loyalty to the profession and to the people engaged in it is another funda-

mental point in any professional code of ethics. Personal grievances and unfavorable criticisms of colleagues should be directed through proper channels. Teachers should refrain from underbidding a rival for a position. Likewise, endorsement of educational materials for personal gain should not be made.

Teachers, like other professional persons, are interested in seeking and supporting fair salary schedules. One of the chief difficulties in the teaching profession is that salaries are too often inadequate. This has been one of the important factors contributing to an inadequate number of persons seeking admission and the large number leaving the profession. There is reason to believe that as we become more professional, salaries will be increased.

There appear to be changes in the accepted patterns of conduct for teachers. In many communities such limitations as no smoking or dancing have been relaxed. The idea that the conduct of a teacher should conform to the accepted behavior of the most wholesome people in the community appears to be sound. A teacher should make his contribution toward the improvement of the community.

A Professional Person Has Pride in the Profession

The professional person reflects satisfaction in his work. He has a point of view that no other work is more important. He is interested in telling others the good news about his profession. At this point the teaching profession needs to make some improvement. For too many years we have been apologetic about being a teacher. Too many of our members have reflected dissatisfactions, thereby encouraging students to engage in other pursuits. In many cases, it is the incompetent, unprofessional person who is dissatisfied. The causes for the dissatisfactions should be determined and a program developed to remove them. This is our professional responsibility.

Experiences with - -

(Continued from Page 188)

niques of developing and using their own visual aid materials.

What of the Future?

- It is always dangerous to try to predict the future. In spite of the dangers involved a few predictions seem to be in order
- 1. The development of source units seems likely to go forward during the next few years. Two aspects of this development seem clear. The first is that some source unit materials may be developed on the state level and distributed to teachers. The second is that much of the detail of source units will be supplied by individual teachers or by small groups of teachers working out materials adapted to their local areas.
- 2. Future publications of the College may be developed with suitable visual aids to accompany them. These may take the form of sets of slides, movies or T.V. kinescopes which will supple-

ment and complement the printed bulletin.

- 3. Teachers will be better trained at the pre-service level. Undoubtedly teachers are better trained than they were a generation ago. But all of us would agree that improvement may still be made. Improved instruction in college classes, either in professional education courses or in technical agriculture classes will do much to raise the quality of training of teachers. This improvement will result as the college staff becomes more aware of its opportunities for improving instruction and as it develops better understanding of the needs of teachers it helps to train.
- 4. In-service training of teachers will need to be adapted to meet the needs of teachers for further help in the use of instructional materials for more effective teaching. For example, groups of teachers are already asking for help in the further development of source units. Other groups have asked for help on how to make better slides, how to take better pictures for instructional work, how to make more effective charts and exhibits and how to make better use of these materials in their schools.

Editorials (cont'd)

(Continued from Page 175)

body. Henry Groseclose of Virginia on a hospital bed dreamed out the elements that later became the Future Farmers of America. Let those who follow remember that the farm boy of today must have the challenging leadership that will enable him to find and fill his place in the whirling vortex of clashing ideologies and social and economic upheaval.

Doctoral programs should be concerned with much more than educational minutae in making their contribution to the development of leaders who are so sorely needed in these days of worry and international travail

Cover Picture Legend

The cover picture shows the Advisory Committee to Agricultural Education and General Agriculture on the campus of the University of California at Davis. They are evaluating and making recommendations for the continued progress and improvement of agricultural education and general agriculture. Reading from left to right, the membership of this committee is Russell Perry, Professor of Agricultural Engineering, John Oswald, Associate Professor of Plant Pathology, Luther D. Davis, Professor of Pomology and Chairman of this committee, F. N. Briggs, Dean of the College of Agriculture and ex-officio member of this committee, S. S. Sutherland, State Teacher Trainer of Agricultural Education, Robert Allard, Associate Professor of Agronomy, and E. M. Juergenson, Assistant Teacher Trainer of Agricultural Education. These people are vitally interested in the program of training teachers of vocational agriculture and meet periodically to plan a program which will be most effective in meeting current needs.

The A CRICULTURAL E D'UCATION Magazine

VOLUME 26

MARCH, 1954

NUMBER 9

Jeaturing ...

Improving Supervised Farming Programs



Picture legend, page 215

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,



MANAGING EDITORS

- W. A. Smith, Cornell University, Ithaca, New York,
- W. Howard Martin, University of Connecticut, Storrs, Connecticut Consulting Editor
- Byron J. McMahon, Buréau of Agricultural Education, 721 Capitol Ave., Sacramento, California Business Managér

SPECIAL EDITORS

CENTRAL

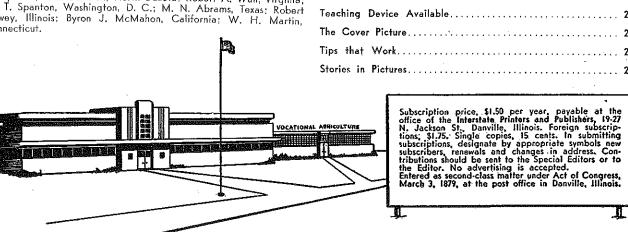
- J. N. Weiss, University of Illinois, Urbana, Illinois
- H. P. Sweany, Michigan State College, East Lansing, Michigan NORTH ATLANTIC
- H. R. Cushman, University of Vermont, Burlington, Vermont S. D. McMillan, Dept. of Education, Charleston, West Virginia PACIFIC
- S. S. Richardson, Utah State College. Logan, Utah
- L. L. Knuti, Montana State College, Bozeman, Montana SOUTHERN
 - R. H. Tolbert, University of Georgia, Athens, Georgia
- O. L. Snowden, Mississippi State College, State College, Miss. Henry Ross, Texas A. & M. College, College Station, Texas
- AT LARGE
 - L. E. Cross, 409 Almaden Avenue, San Jose, California Teachers
 - A. H. Krebs, University of Illinois
 - **Book Reviews** J. K. Coggin, North Carolina State College, Raleigh, N. Car.
 - H. N. Hansucker, U. S. Office of Education, Washington, D. C. Vocational Division

SPECIAL REPRESENTATIVES

Pacific, Jack Ruch, Laramie, Wyoming Southern, E. W. Garris, Gainesville, Florida North Atlantic, Earl H. Little, Concord, New Hampshire Central, Ernest L. DeAlton, Fargo, North Dakota N.V.A.T.A., Robert Howey, Newark, Illinois

EDITING-MANAGING BOARD

Jack Ruch, Wyoming; E. W. Garris, Florida; Earl Little, New Hampshire; E. L. DeAlton, North Dakota; Robert A. Wall, Virginia: W. T. Spanton, Washington, D. C.; M. N. Abrams, Texas: Robert Howey, Illinois; Byron J. McMahon, California; W. H. Martin Connecticut.



Contents

Editorials Guest Editorial Herbert L. Schaller...... 195 Learning by Doing with Broilers.... Dynamics of Individual On-farm Instruction..... Lloyd J. Phipps...... 197 Toward Greater Coordination between Farming Programs and Agriculture in the Community..... Otto Mertz 198 Analyzing Sow and Litter Enterprises..... Arlyn W. Hollander 199 The Wheel of Vocational Agriculture..... L. C. Finley 200 A Basis for Measuring and Evaluating the Supervised and Directed Practice Programs..... Glenn E. Underwood 202 1954 Program of Work of the Agricultural Education Division, American Vocational Association.... Lloyd J. Phipps 204 A New Twist in Supervised Farming. Hubert Welton 208 Building Better Supervised Farming Programs..... C. E. Richard 209 Agricultural Curriculums in the Junior Colleges..... Farming Programs of Kansas Vo-Ag Students.... James D. Dobkins...... 213 Book Review 215



Guest Editorial

HERBERT L. SCHALLER, Editor, Better Farming Methods Magazine

I was a town boy. I took vocational agriculture, belonged to the local FFA Chapter, and served as one of its leaders.

My supervised farming program was very meager, not up to the standard set by farm boys. My profits were exceptionally small. My fair ribbons were few and far between. I never became a Chapter, state, or American farmer.

But my interest in agriculture grew from these experiences, surpassing that of many of the farm boys who had every opportunity to make the most of the Vo-Ag program.

The sympathetic understanding and encouragement of my vo-ag teacher for a "town boy" led me to seek a college degree in agriculture and prepare to enter the vocational agricultural teaching field.

With this as a background, let me raise three points that I believe offer a distinct challenge to vocational agriculture today.

1. You should encourage town boy participation in vocational agriculture.

Yes, encourage it. Some states, administrators, and teachers, I understand, prohibit town boys from taking vo-ag. But if the boys show an interest in Ag, vou should cultivate and develop that interest.

Why encourage town boys to take Ag? Let me give two distinct reasons.

(a) A vocational agriculture program should serve the interests of the entire community and the entire field of agriculture—not just the direct business of farming.

Town and city people have a stake in your program. Town and city boys do, too. In many cases, the future of agriculture and the future of your program may rest with the opinions and beliefs that town boys come to

They may not always farm, but they may be in a position some day to help or hinder agriculture and farm people. Then, you should not lose the opportunity now to mold their beliefs and opinions while in high school.

(b) It is good public relations for you and agricul-

One of the subjects discussed wherever Ag people meet is the relationships between farm and city people. From past experiences, you know that many city people often give agriculture a "black eye" because they lack an understanding of the problems of farm people.

Might not this offer an excellent way to build better relationships between these two groups? You have an opportunity to teach town boys an understanding of and an appreciation for the entire field of agriculture.

If you believe that you have the best program in agriculture, not only for your farm people but for the good of all people, then why not use it to the best advantage on such a group of boys? (Continued on Page 207)

Entron's Note: Mr. Schaller has taken a stand on two or three of our controversial issues in Vocational Agriculture. There are those who will disagree with him. We trust that other points of view will be stimulated. The Magazine stands ready to provide a forum for either side of the

Guide-posts to improvement

The theme for this issue implies that improvement in supervised farming programs is assumed as both a need and a possibility. None of us is likely to question this assumption as we reflect upon the developments which have taken place to date in vocational agriculture and the challenges which currently face us for both the present and future.

What are the directions in which such improvement can be made? For example: Is the position of supervised farming programs in the process of enabling a pupil to prepare for his vocation the same as it has been, and should it continue to occupy that position or become even more dominant? Is the scope of supervised farming programs as a means of learning through doing all that we would have it be today? Is the quality of the experiencing which our supervised farming programs are providing as great as it can be or needs to be? Are we emphasizing the proper outcomes of supervised farming programs in stressing dollars earned; assets acquired; knowledges and skills obtained; motivation produced; requirements met; promotional and publicity values; attitudes developed, and so on? Where is the emphasis and what should it be? Is the supervised farming program a selective device for enrolling and continuing pupils in vocational agriculture curriculums, should it be, and, if so, how and why should it be used to that end? These are not all of the questions which can be raised as we reflect upon the possible directions in which supervised farming programs may be im-

Rather than to continue to raise questions we will take a stand on at least one possible direction for improvement, a direction incidentally in which some progress is being made. It is this: the expansion of change in concept beyond the project dominated program to a program built out of the planned participation of the pupil in solving real problems of farm operation and management involving both skills and decision making. The more we see of this growth in concept applied in supervised farming programs and the more we reflect upon its possibilities as a means of preparation for farming, the more we are prone to believe that the project idea or concept, so useful to us in the past in reaching our present stage of development, is threatening to become the greatest single deterrent to increasing the effectiveness of programs of preparation for farming. Perhaps it was the Veterans training program which helped us to open our eyes to the limitations of the project idea and to the far greater opportunities available through planned participation in the greater variety of genuine farm experiences.

The companion editorial in this issue refers to the appropriateness of non-farm boys in vocational agriculture. With this point of view we agree but for different reasons and under different circumstances. There are occasional non-farm boys with a genuine interest in preparing for farming. One of the limi-

(Continued on Page 202)

TN agricultural

grams it is as-

sumed that much

of the instruction

will be done on an

individual basis on

the farms of the

students. The

value of this indi-

vidual instruction

is usually recog-

nized as being im-

portant by teach-

education pro-

A Group Project Provides Learning Opportunities

Learning by doing with broilers

PAUL BURNS, Vo-Ag Instructor, Tecumseh, Michigan

group project may be effectively A group project may used to introduce new projects to students. As such our broiler project was set up to stimulate interest in broiler raising and to instruct the students in the proper methods of raising, housing, and dressing farm poultry for home and commercial use.

The broiler project of the Tecumseh, Michigan, FFA Chapter is managed by the Chapter as a group. It decides whose farm the brooder house will be moved to for the raising of the chicks and what practices will be used by the student having the responsibility of raising the birds. The boy raising the birds uses practices of operation which have been approved by the Chapter particularly as to temperature control and ventilation of the house, and other decisions which must be made while the project is being conducted on his farm. All managerial problems of the project are brought before the group for final decision.

Tecumseh is located about 75 miles from Detroit, where about 85% of all poultry is brought in from out-of-state. and also 40 miles from Jackson, Michigan, and Toledo, Ohio, which also offer good markets for local poultry. With these market opportunities so close by, a broiler production project seemed to be a desirable farming enterprise for students and parents of the community,

Through this Future Farmer group project the students have learned how to carry out the complete cycle of broiler raising from building the house to dressing and selling the broilers.

Project Provides Instructional Problems

This broiler project has helped to teach broiler raising in a real problem situation and to relate instruction in farm mechanics to this productive enterprise.

Instruction in farm mechanics was provided through the building of the brooder house and the processing equip-

ment. Classroom instruction in the form of blue-print reading, carpentry, arc welding and gas welding took place in the process of building our brooder house and picking machine. Instruction in broiler production in the classroom was based on problems that occurred in the process of going through the different stages of raising the birds. Selecting chicks from an approved hatchery, housing problems in relation to litter, ventilation, light, space requirements, and feeding and management problems in broiler production were discussed. All of the class members took part in building the 10' × 12' gambrel-roof type brooder house. It cost the Chapter \$140 to build. A bottled gas brooder was installed for us by a local dealer at an additional cost of \$76.

Students Get Experience as Brooder House ls Rotated

To give as many students as possible emperience in raising broilers, the house is moved to a different boy's farm after each brood. Local implement dealers have moved it for the Chapter. Letter writing and all business for this production project is carried on by the group. This was another field of instruction. Thus the FFA as a group took part in a community public relations program.

Individual instruction in the form of supervised farming is given the three boys who raise the three broods. Complete records for each batch are kept by the student caring for the birds. Experience is gained in the use of approved up-to-date feeding and management practices which are determined by the group as a whole. It must be noted here that the parents sometime disagree with our methods. The built-up litter system which the Chapter has used causes the most discussion. So far it has proved satisfactory for this house.

Dressing Birds Adds to Instruction

A public relations program was evident again when the first and second

broods of broilers were dressed. A member of the Young Farmer class offered the use of his dressing plant for the first brood we dressed. This gave the students a chance to see a dressing plant in operation, and also gave a good start in using approved practices in dressing broilers. The first brood was packaged whole in freezer bags by the boys. The second, raised by a different student, was dressed in the school shop. A borrowed picking machine was used to pick the birds. The picking equipment for the third brood for this year included classroom instruction in farm mechanics again. A picking machine and funnels were built by the students in the farm shop class at a cost of \$48. Another method of dressing the birds was used this time. They were cut up, placed on meat trays, then bagged. The customers -parents and townspeople-will be charged for the bags in the future. Freezer bags cost \$7 per 150, which cuts down considerably on the Chapter's

The next brood, started last June, will probably be dressed in the new laboratory of the agriculture room which is now in the process of being built as a part of the addition to the high school building. This project proved to the superintendent of schools and board of education that a laboratory was necessary for an agriculture department to help make instruction more practical and

Prior to dressing the birds, methods of marketing poultry were discussed in the classroom. Costs and efficiency methods were summarized by classes at the end of each production period. It was found that heating expense during the winter months was 12c per bird as compared to 4c achieved by one of the young farmers who has a large oper-

Project Fits Into Other Activities

The FFA point system is employed for all labor connected with the project. This includes points for the students raising the birds and for those dressing and selling them.

Fifty of our broilers were dressed for the annual Parent and Son Banquet. Local businessmen who had helped in the enterprise were also invited to the banquet.

(Continued on Page 202)



use of deep litter system.



Parent and student discussing the deep litter system. The student is Student has elevated the drinking fountains and feeders to keep explaining this system to his father after classroom instruction on feed and water clean. The merits of such practices are learned through actual use.

Dynamics of individual on-farm instruction

It is important in dealing with all levels of students

LLOYD J. PHIPPS, Teacher Education, University of Illinois



Lloyd J. Phipps

ers, farm leaders, administrators, and students.

Often, however, individual instruction is slighted because time is not "earmarked" for it or because the "know how" for effective individual instruction is lacking. Lack of knowledge or ability to provide effective individual instruction may cause an agricultural education worker to avoid it and to expend his efforts in other ways. This lack of knowledge or ability may also have an undesirable effect on the attitudes of the students toward individual instruc-

If teachers are to obtain sufficient time to do individual on-farm instruction, the quality of the instruction must be high so that the students will demand it. The following statements are designed to present a few ways that may, if practiced, raise the quality of individual on-farm instruction.

How It Differs from Other Types of Instruction

In providing instruction on a farm, a teacher talks usually to one person or to a very small group of persons. This is in contrast to class-groups composed of several individuals. Since the teacher is working with one person or a very small group, he can expect more "give and take" of comments in the discussion from each person involved. More interruptions of a teacher's remarks or comments can be expected, and more direct and specific questions often are asked.

A teacher often encounters a more critical attitude toward ideas on a farm than in a classroom. No "mob psychology" regarding ideas is operating. The objective of a discussion is often more specific, more personal, and more "action centered" than it is in a class discussion. None of these situations makes individual on-farm instruction necessarily more difficult or easier than class instruction. However, to provide effective individual on-farm instruction, a teacher must recognize the characteristics of this type of instruction and adjust his actions accordingly.

¹B. Franklin Bills. "Fundamentals of Salesmanship," 1951, 16 pp. (Mimeograph)

Habits or Ways of Thinking of Individuals

Since no "mob psychology" is operating in individual on-farm instruction, a teacher needs to analyze the thinking habits or moods of the person he is instructing. He cannot "pitch" his efforts for an average individual.

Most persons are normal individuals with attitudes, interests, and ideas that correspond with the average for a community. There are individuals in every community, however, who differ from the mean in that they are usually interested in specifics. Other individuals differ by being more creative-minded than an average individual. A few individuals are often emotional; they allow their emotions to control their actions to a great extent. Some individuals have a tendency to be skeptics or "smart alecks." A few individuals are often negative minded. They are against everything.

These classifications are not rigid. A person may exhibit the characteristics of one classification one day and the characteristics of another classification another day. Or, a person may display the characteristics of a number of these classifications during one farm visit. To be most effective, a teacher must recognize the mood or way of thinking which an individual is exhibiting and adjust his instruction accordingly.

The mood or way of thinking of an individual is usually evident by how he reacts verbally, by his physical activity, or by how he "looks."

For example, if a teacher stops at a farm of a man who is enrolled in his corn production course and introduces the discussion by asking how his corn is doing, a normal individual probably would invite him to look at his growing corn and ask him how much more the corn which has been side-dressed will produce. Or, he may ask him some questions regard-

ing possible future action. If the farmer

replies instead, however, that he has a population of 15,000 plants an acre, that the average length of the cars will be six inches, and that the tissue tests showed a slight deficiency of potash, the individual usually can be classified as a person interested in specifics.

If the individual replies that he

crop is going to he a total failure and that he wishes the people with the rain machines would be put in jail, he usually may be classified as an "emotional."

If the reply is that he has tried several different fertilizer treatments on his corn crop and that he wants some help in analyzing the results, he is probably a "creative minded" individual.

If the reply is a statement implying that all a teacher has to do is ride around the country, he might be classified as a "smart aleck."

If the reply is to the effect that it doesn't make much difference how his corn is growing because the politicians will manipulate prices so that he can't make a profit anyway, he might be classified as having a "negative attitude." Since some of these moods or classifications, such as a negative attitude or an emotional mood, are closely related, a person may shift from one to the other very rapidly or they both may be in evidence together.

How to React to Different Thought Patterns

A teacher, for most effective results, needs to adjust his reactions and procedures according to the mood or habit of thinking of the person he is instructing. A normal individual is usually curious. He wants to know "why" as well as "how" and "what." He responds well to a problem solving approach. He appreciates a teacher's help in thinking through his problems. He usually responds well to such questions as, "what do you plan to do in regard to . . . ?" or, "have you ever thought about doing something about the problem of . . . ? If a person is a "specific," an individual interested in details, he will usually respond to an opportunity to discuss what he knows and what he has done. He will usually be interested in hearing about research results. He may even be disappointed when a teacher does not have some recent experimental data to which he can refer.

A creative-minded person is usually interested and ready to discuss future changes in his farming operations or plans. He thinks best and learns best when planning for the next steps. A teacher who uses time in "small talk" or in the presentation of data and information before it is needed in making

(Continued on Page 202)



The correct analysis of, and reaction to, the mood or attitude of a thinks his corn farmer often makes individual instruction more effective and efficient.

Toward greater coordination between farm-

A Study of the Supervised Farming Program in California*

ing programs and agriculture in the community

OTTO MERTZ, Research Assistant, University of California, Los Angeles



Otto Mertz

QUPERVISED farming is generally accepted as the heart of the program in vocational agriculture. These farming programs are both unique and important because they should. provide rural boys nowen rolled in public secondary schools with the skills and experi-

ences needed to farm.

Providing such vocational education in agriculture is a gigantic and challenging task. In addition to the rapidly changing methods used in mechanized agriculture, production is becoming more diversified and complex. At the same time fewer farmers are expected to produce food for more people from the same area of land.

Purpose and Scope of the Study

An investigation of the supervised farming program as an instructional device in California has been approached from three different aspects (1) the historical development of the supervised farming program, (2) an analysis of the supervised farming program as recorded in the Annual Descriptive Reports of the California Program for Vocational Education (1932-52) and comparing these figures with those of the total farming industry in California; and (3) on the basis of this information, a questionnaire was constructed and used to collect further data from the teachers of vocational agriculture on their supervised farming programs.

The central theme of this study dwells on the hypothesis that crops are not receiving the attention they merit in the training of future farmers for California. Regional supervisors readily agreed and admitted that the emphasis was not as great on crops as it should

After presenting considerable evidence verifying this assumption, possible reasons for this condition were sought.

Historical Findings

The historical development of supervised farming programs in California indicated (1) that both school farm laboratories and the home farms of students taking vocational agriculture have been used in conducting supervised farming programs; (2) that projects developed from single enterprises (1917-1934), to farming programs conducted largely for showing at fairs and shows (1935-1940), and finally more compre-

*Based on Doctoral Dissertation, University of California, Los Angeles, 1953.

hensive supervised farming programs were developed including supplementary and improvement projects as well as placement for farm experience; (3) that enrollment in vocational agriculture increased from less than four thousand students in 1929 to over twelve thousand

A study of the Annual Descriptive Reports of the California Program for Vocational Education for twenty years (1932-52), revealed that the percentage of the production projects which were in livestock increased from 77.5 to 87.5. On the other hand the percentage of crop projects decreased from 22.5 per cent in 1932 to 12.5 per cent in 1952.

Other information from the Annual Descriptive Reports of the California Program for Vocational Education showed that from 1937 to 1952 improvement projects increased more than threefold, while supplementary farm practice and placement for farm experience have increased almost ten and five times respectively. The fact that the enrollment in vocational agriculture during this same period (1937-52) did not double in number produces evidence that supervised farming programs have become progressively more comprehensive.

Comparison with Total Farming Industry in California

The number of animal units and acreage in crops in the supervised farming program was compared with that in the entire farming industry in California. During a sixteen year period (1937-52), the following differences were observed: (1) the number of swine, dairy cattle, beef cattle, and sheep and lambs has increased with far greater rapidity in the supervised farming program than in the farming industry in California; and (2) the number of poultry and acreages in field crops, commercial vegetables, and fruit and nut crops has not increased as rapidly in the supervised farming program as in the entire farming industry in Cali-

Percentages were used to show the extent to which different farming enterprises are represented in the supervised farming program. The extent that different livestock and crop enterprises of California have been represented in the supervised farming program were found to be as follows: (1) swine, 1.58 per cent: (2) poultry, 1.02; (3) dairy cattle, 0.47; (4) sheep and lambs, 0.23; (5) beef cattle, 0.19; (6) commercial vegetables, 0.15; (7) field crops, 0.12; and (8) fruit and nut crops, 0.10 per cent.

A study of the cash receipts from sales of agricultural products in California for a sixteen year period (1937-52) revealed that 65.5 per cent is derived from crops and 34.5 per cent from livestock. For the same period of time,

livestock projects composed 81.2 per cent of all projects in the supervised farming program, while crop projects represented 18.8 per cent. Indications are that community surveys have in general not been used fully enough to bring about a closer relationship between the supervised farming programs and the farming industry of the community they are

THE AGRICULTURAL EDUCATION WLAGAZINE, NIWCH, 1994

Responses from Teachers

One hundred fifty-seven or 66.8 per cent of all departments of vocational agriculture in California responded to the questionnaire. These departments enroll three-fourths of all students taking vocational agriculture in California secondary schools. This survey revealed that 75.8 per cent of these departments take beginning students to visit supervised farming programs of other students. However, they visit twice as many livestock projects as crop projects. About ninety-four per cent of these departments teach students the relative importance of the productive enterprises in the community. This time was distributed almost evenly between crops and livestock,

Of the one hundred thirty-two departments making pre-enrollment contacts, twenty-two departments guide prospective students so that they start their farming programs with livestock, while only three departments do so for crops. The remainder of the departments indicated no preference.

Of the one hundred forty-seven departments encouraging their students to do long-term planning to become established in farming, thirty-one advocate that they do so by starting with livestock, while only nine advocate that students start farming with crops. The remainder indicated no preference.

Most departments expressed a need for more correlation between classroom instruction and crop projects in the supervised farming program. Fewer departments expressed this need for livestock projects.

Criteria Used in Evaluation

The criteria used by departments in evaluating crop and livestock projects which received the highest ratings were (1) application of approved practices; (2) development of managerial abilities; and (3) accuracy and completeness of record books. On all evaluative criteria little difference existed between the value ratings of crops and livestock, except for results from show-rings and fairs. These criteria rated higher for livestock than for crops.

The activities most effective in promoting and motivating crop and livestock projects were (1) recognition of students who succeeded; (2) field trips to outstanding projects; and (3) advancement within the Future Farmers of America.

The activities which ranked least effective showed the biggest differences between crops and livestock, being more effective for the latter. They were (1) fairs and shows; and (2) judging con-

In general, the problems which ranked (Continued on Page 209)

Analyzing sow and litter enterprises

Analysis can be used to improve supervised farming programs.

ARLYN W. HOLLANDER, Vo-Ag Instructor, Markesan, Wisconsin



Arlyn W. Hollander

THE primary my 65 vocational ■ purpose of farming programs in Vocational Agriculture is to supplement classroom instruction so as to train present and prospective farmers for proficiency in farming. In a farming program, such as a sow and litter, I am interested in seeing if a

boy will go ahead and put into practice the recommended practices that he has learned in connection with his classroom work. Whether or not a boy puts these recommended practices into use will determine the efficiency with which the enterprise is conducted,

Factors in the Analysis

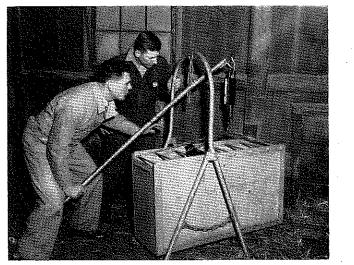
The factors for success in a sow and litter enterprise are worked out each fall with the freshman class. The sow and litter enterprise is used as an example. The success factors in a sow and litter enterprise help to form a basis for presenting the three-week unit on swine management during the sophomore year. The basic facts on feeds and feeding are taught in an eight-week unit during the sophomore year. The following fourteen success factors have been evolved: (1) Breeding-Were purebred boars of the best type used on good type gilts? (2) Feeding-Did the sows and gilts, before and during pregnancy, receive well balanced rations which met the needs for proteins, minerals, and vitamins? (3) Exercise-Did the sows or gilts receive plenty of exercise during the gestation period? (4) Management of the sow at farrowing time—(a) Were the pens scrubbed with boiling lye water? (b) Was the sow properly washed before going into the farrowing pen? (5) Did the sows have attention and care at farrowing time? (6) Were heat lamps properly used? (7) Were the pigs creep-fed a well balanced mixture starting at 7 to 10 days of age? (8) Were the boars castrated well before weaning? (9) Were the pigs slop-fed or self-fed a well balanced ration? (10) Were the pigs treated for roundworms and mange? (11) Did the pigs have clean pasture of good quality—alfalfa, Ladino clover, or rape? (12) Did the pigs have shade, water, and salt at all times? (13) Was there a high degree of regularity in feed and care of the pigs? (14) Was a B-Complex vitamin supplement containing an antibiotic used in the ration?

The Situation to Be Analyzed During the 1951-52 school year, 22 of agriculture students were enrolled in sow and litter enterprises. Each of the 22 boys was also enrolled in the Wisconsin Swine Sclection Program. This program involves the keeping of a few simple records: (1) the

farrowing date of each sow, (2) the ear notching of each pig for future identification, (3) an accounting of each pig from birth until weighed; and (4) weighing of pigs at five months of age, or 154 days.

The 22 boys had 40 sows which farrowed 347 pigs, or an average of 8.68 pigs per litter. A total of 270 pigs were raised, or an average of 6.75 pigs per litter. On a percentage basis the results are as follows:

77.8% of the pigs were raised 7.8% were born weak or dead 7.5% were laid on



Pupil and teacher use the weighing crate to determine weight of pigs at five months of age. Such data are necessary for making an analysis.

4.0% died from scours

2.9% died from miscellaneous causes.

It is my firm belief, that 90% of the pigs farrowed could be raised. By proper feeding, care and management the losses in each case above could be cut at least

I have found that it takes from six to eight visits per year to properly supervise a sow and litter enterprise. During the visits, each boy is carefully rated on the 14 success factors. The importance of employing as many success factors as possible in conducting the sow and (Continued on Page 213)

Table I. Comparison of Data from Cases with More Than One Litter.

| • | Boy No. 7 | Boy No. 13 | Boy No. 3 | Boy No. 1 |
|--|------------------------------|----------------|---------------------------------------|------------------------------|
| Number of litters | . 3 | 3 | 3 | 7 |
| Pigs farrowed | . 35 | 20 | 25 | 63 |
| Pigs raised | | 19 | 22 | 42 |
| Lbs. pork per sow— 154 days———————————————————————————————————— | . 1400 | 975 | 777 | 571 |
| Av. wt. per pig at 154 days | | 154 | 106 | 111 |
| Av. daily gain to 154 days | | 1.00 | 0.69 | 0.72 |
| Lightest pig at 154 days | | 115 | 80 | 75 |
| Heaviest pig at 154 days | | 190 | 150 | 155 |
| To get 225 lbs. after 5 months | .6 weeks | 5½ weeks | 10 weeks | 9 weeks V. Poor |
| Pasture | Exc. Alfalfa | Exc. Alfalfa | Fair alfalfa | Alfalfa- Timothy |
| Ration rating | .Excellent | Excellent | Very Good | Excellent |
| Lbs. of feed per 100 lbs. | a.u.s | | 100 | 110 |
| gain | .379 •12.00 | 370 \$12.95 | 409 \$15,13 | 412 \$18.54 |
| Feed cost per 100 lbs. gain. Total cost per 100 lbs. gain. | | \$16.19 | \$18.91 | \$23.18 |
| Market price at 225 lbs | • | \$19.85 | \$18.40 | \$19.00 |
| Profit or loss per 100 lbs. | . \$20.40 | ф19.03 | φ10 .4 0 | φ13.00 |
| gain | Plus \$4.15 | Plus \$3.66 | Minus \$0.51 | Minus \$4.18 |
| Labor income per sow | | \$69.34 | \$43.91 | \$165.62 |
| Sales | 5 for pork .10 boars sold | 16 for pork | 6 for pork 10 boars sold 1 gilt | 16 for pork 13 boars sold |
| | kept 14 gilts | 3 hoars sold | 1 0 | kept 13 gilts |
| Lowest index | | 80 | 50 | 30 |
| Highest index | | 113 | 92 | 114 |
| Average index | .102 | 96 | 74 | 77 |
| Factors increasing efficiency | _14 | 14 | 13 | 12 |

Parental cooperation results from understanding - -

The wheel of vocational agriculture

L. C. FINLEY, Vo-Ag Instructor, Carthage, Mo.

Opportunities

for the acquisition

of some skills and

the use of some

technical informa-

tion are provided

at the school and

on field trips.

However, to limit

our training-by-

doing to these ac-

tivities would pro-

hibit the use of

the word "voca-

tional," because

opportunities for

the students' doing

to learn are too re-

stricted. In keep-

DROBABLY the supervised farming program is the weakest part of our entire Vocational Agriculture program. The above statement has been made many times. It is an unfortunate situation, because an adequate supervised farming program is an indispensable part of a successful course in Vocational Agriculture.

A boy should acquire an adequate supervised farming program very early in his first year of training, for the obvious reason of providing himself with training facilities. Moreover, this is the most critical time for the acquisition of a project program because a boy's enthusiasm for a project is usually at its highest point at that time. This enthusiasm can fade and die rapidly after the time for its bearing fruit has passed. The boy's parents experience a rise and fall of interest in the boy's supervised farming program at about the same time the boy does. Most beginning students of vocational agriculture and their parents find the supervised farming program idea different from any previous experience, Words alone are hardly adequate to clarify the significance and proper relationship of the project program to the remainder of the vocational agriculture program.

Use of an Illustration

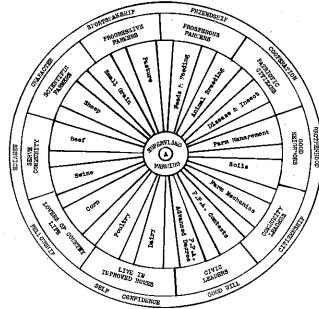
I have used a demonstration by assembling a wheel to illustrate the importance of the supervised farming program. It was given before my Vocational Agriculture I class on the first day of school and before the parents of the same boys on a "Back to School" parents' night. The illustration seemed to appeal to the imagination of both boys and parents.

To construct the wheel, the hub, the spokes, felloes, tire, and title are cut from cardboard. Sand-paper is glued on the back of all parts with rubberized cement, A 4' × 4' piece of plywood is covered with flannel. The wheel should be made large enough for the audience to read all words written on it. The one I used for my classroom is two and one-half feet in diameter.

Building the Wheel

To begin the illustration, the title is placed on the flannel board above the location for the wheel. Each word is on a separate piece of cardboard. At this point, the audience is informed that students of vocational agriculture learn to live a life of service and happiness as well as to make a good living through the use of good farm practices. This fact is illustrated by the FFA motto, "Learning to do, Doing to learn, Earning to Live, Living to serve."

The wheel of vocational agriculture



This is the completed picture when put together as a part of an illustrated explanation of Supervised Farming Programs.

ing with the second line of our motto, we must provide opportunities for doing. It has been said that the prerequisites to learning are a realization of a need and a desire to acquire knowledge and skill to meet that need. A supervised farming program which is owned, operated and managed by the student creates a situation that is conducive to these requirements. In other words, through the supervised farming program, learning is accomplished by doing. It is logically in the center of the wheel. (hub of wheel is put in place) It is the center of the boy's course in vocational agriculture toward which knowledge and skills acquired in his studies and activities in school are directed. The student of vocational agriculture who starts his four year course with an adequate supervised farming program and expands it in scope, will be well on his way toward sufficient facilities for a full-time farming program upon graduation from high school. He will have accomplished the third part of the FFA motto, "earning to live," by acquiring livestock, equipment and cash as he learned the better ways to farm.

In the center of the hub you see the letter A. This is the axle and represents the boys' attitudes and abilities. These two factors are properly located in the center of the hub because of the relationship that exists between them andthe supervised farming program. Boys with adequate supervised farming programs possess cooperative attitudes and develop outstanding abilities,

Relation of Course of Study

A course of study, which includes the leading enterprises in our community, has been formulated. This course includes dairying, (spoke with the word dairy is placed in position and other spokes are assembled as the name of enterprise is called). To merely study these enterprises in class, the course would not be vocational in nature. With

adequate supervised farming programs, the boys see a real need for information and skills. Every spoke in this wheel is strong and durable and will keep the wheel well balanced, but they can only give needed support to the hub, the center of activity and progress. If a hub is strong and is being used to its capacity, it will need the support of every spoke. Just as a strong hub is necessary for a wheel to travel very far, only with a strong supervised farming program do future farmers ever reach the higher degrees of the FFA organization. (The rim of the wheel is put in place, one-half at a time as the statement below is being made.) If the boys begin with adequate supervised farming programs and develop them through their four years of vocational agriculture and FFA work, the felloes will automatically take their places as prosperous farmers, patriotic citizens, good neighbors, community and civic leaders. They will live in good homes, will be progressive, scientific farmers who will serve their communities well and love country life. They will fulfill the fourth line of their motto, "living to serve."

Parents Get the Point

With the heavy load these felloes must bear, because of their position, they need a tire. It will absorb some of the shocks and help smooth out the rough places as they travel the road of life. This they have been developing ever since they first became Future Farmers of America. (Place tire in one piece in position.)

Parents have a right to expect their sons to be like these felloes after they have completed their four-year course in vocational agriculture in our high school. (The hub is removed from the wheel.)

A boy in vocational agriculture without a supervised farming program is like a wheel without a hub and will go (Continued on Page 212)

Teach labor efficiency

Through Supervised Farming Programs

CLIFFORD LUDERS, Vo-Ag Instructor, East Aurora, N. Y.



TO change the L daily habits of the average farmer is difficult indeed. This is a factor in the problem facing the teacher of agriculture in improving the labor efficiency of his students through the supervised farming program.

Unless you have the co-operation

and confidence of both the father and son you will not meet with a high degree of success. Of utmost importance is being familiar with the entire farm situation. A knowledge of the farmer's goals, available capital, work skills, and equipment is necessary in carrying out the labor saving suggestions.

The individual student must first recognize the importance of saving time and labor which in turn means more dollars in the pocket and more free time for pleasures such as sports and television.

Stimulate Interest in the Program

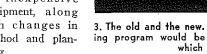
A few catchy slogans frequently help to alert the student to the possibilities of doing the job more efficiently. Some examples are:

- (1) 5 steps per day = 1 mile per year.
- (2) Who will walk-you or the chicken?
- (3) You can push more (on wheels) than you can carry,

A movie, slides, or filmstrip on labor efficiency shown at an evening meeting for parents and students will stimulate interest in finding out the weaknesses on the farm,

A well-planned tour for fathers and sons to several efficient farms that are accomplishing a large number of manwork-units per discussion on "saving labor." Emphasize the small

man will start a and inexpensive equipment, along with changes in method and plan-



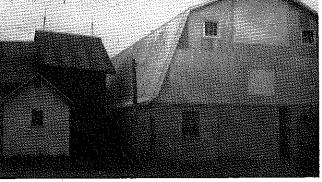
Get Labor Efficiency Operating on the Farm

Each student should make a list of his operations in performing his various farm jobs. Compare these operations with those of other students and recognized studies.* The student then decides. under supervision, what operations can be eliminated, combined, or retained.

A study of distance and time will help persuade the student that improvements could be made in his work methods. It is also necessary to spend a few evenings at chore time to help check figures and discuss the problems and plans with the father and son. As a result of his studies the student lists the jobs where distance is excessive and where time is too great. Suggestions are made for shortening the distance and decreasing the time to do the job.

A list of all equipment used will enable the student to compare his facilities with those of other students and good farms.* As a result the student lists all essential equipment. He then decides whether it is easier and cheaper to make or buy the needed equipment.

Before planning any rearrangement of the barn, the student should draw a floor plan to scale of his main barns and on this locate feed and litter alleys, cross walks, and storage facilities. This would be done if the study is on a live-



3. The old and the new. A more effective item in a supervised farming program would be difficult to imagine than the experiences which the pupil had in this case.

stock farm. If the enterprise is poultry, draw a floor plan of the hen-house and on this locate feeding and watering centers, chutes, doors, partitions, nests and egg storing room. As a result of the analysis of floor plans, tentative plans are made for improvement.

As the plans for improving the efficiency of the farm progress, a schedule considering time, capital and need should be set up for each student. (A long range program of yearly improvements should be included in the supervised farm program.) You should not expect the average student to change completely the entire farm set-up that Dad has been using for many years.

Practical Application Through Supervised Farming Program

An illustration of results from a supervised farm program in labor efficiency is at the farm of Joseph Wrobleski, whose son Joe is in the Agricultural Department of Eden Central School.

Picture 1 shows the father and son discussing with the Vo-Ag teacher the question, "How efficient is your barn?" The efficient barn floor plan stressing places for labor efficiency has aroused an interest in the problem.

A study of the feeding of silage, revealed a low ceiling causing back breaking work. The time study showed an excess in this operation due to equipment and distance. The distance was

(Continued on Page 214)



1. The teacher obtains the cooperation of the parent in planning 2. Improvements have been made as a result of planning in the classwith the pupil for supervised farming experience in saving labor.



room and with parent. Supervised farming has been effective.

^{*}Procedures and methods, outlined in this study were condensed from the book Simplifying Farm Work by the author of this article, and published by the Bureau of Ag. Ed., New York State Education Dept., Albany, N. Y.

A basis for measuring and evaluating the supervised and directed practice programs

GLENN E. UNDERWOOD, Vo-Ag Instructor, Princeton, N. J.



Glenn E. Underwood

How can Instruc-tors of Vocational Agriculture adequately measure and evaluate the supervised and directed practice programs of their respective students? The answers to this question are many and varied depending upon the prevail-

ing types of farming, geographical location, tradition, administrative policies, etc. Undoubtedly the most common method is the numerical one, the number of head of livestock or the number of acres of crops. This is only natural as we have become accustomed in our society to measuring our results in this manner. The number of students enrolled is often over-emphasized as a criterion for measuring and evaluating a school-system or a department of vocational agriculture. Likewise, the numerical system is often misleading when used to measure and evaluate the supervised and directed practice programs of vocational agriculture students. We may point with pride to the boy with a laying flock of five-hundred birds or ten-acres of potatoes or cabbage and fail to recognize the one with a few head of purchred dairy cattle or a small acreage of small fruits or vegetables. Yet, it is quite possible that the latter boy will need to devote as much time and effort to his program as the former one.

Since the establishment of the department at Princeton (N. J.) in 1948, we have used productive man work units as a basis for setting up standards and measuring and evaluating the supervised and directed programs of the various age groups. Freshmen, sophomores, juniors and seniors are required to have a minimum of thirty, forty, fifty and sixty productive man work units respectively in order to fulfill the requirements for their supervised and/or directed practice programs. Although results have been encouraging it would be misleading to state that this method has been one-hundred per cent effective during this time.

Advantages and Limitations

The following analysis of the above plan from the standpoint of advantages and disadvantages is based upon the reaction and opinions of (1) state supervisors of agricultural education (2) instructors of vocational agriculture (3) practice teachers and (4) vocational agriculture students.

- 1. It tends to encourage diversification in the supervised practice program.
- 2. Equal and definite standards (based upon amount of work involved) for all students.
- 3. Requirements progress along with age and ability of the student.
- 4. Provides proper incentive for ex-
- Keeps department standards high by discouraging the unqualified student.

Disadvantages:

- 1. The above plan may not be applicable to all sections of the country or to all areas within a state.
- 2. Students with limited facilities may have difficulty in meeting the requirements through the medium of their supervised practice program and may have to build up part of them in the directed practice pro-
- There is a tendency for students to become too complacent when they have satisfied the minimum require-
- In departments where the maintenance of enrollment is an important factor, this plan may be too selective to be practical.
- 5. No credit is given for improvement or supplementary practice projects.

Although the productive man work unit method of measuring and evaluating the supervised and directed practice program may not be adapted to a particular situation, some modification of the plan may be worthy of consideration. It has helped to raise the standard and quality of this phase of our program in the Princeton area.

Dynamics of - -

(Continued from Page 197) decisions or plans may irritate such an

A person whose actions are controlled by his emotions can often be made ready for effective instruction by dramatizing an activity, or by showing or telling how an activity has turned out on some other farm. Dramatizing an activity for this type of individual often fires his imagination and enthusiasm, and he usually likes to be inspired. He often appreciates an opportunity to get on the "band-

A "skeptic" or a "smart aleck" is often the most difficult type of individual to handle. Ability to recognize quickly persons who exhibit the characteristics of a "skeptic" or "smart aleck" will, however, give a sense of security to a teacher and make it possible for him to work effectively with such people. Often "skeptics" or "smart alecks" ap-

preciate a person who recognizes them for what they are by giving them back as much as they give. A teacher cannot afford to allow such a person to embarrass or humiliate him. If a "smart aleck" learns that he is not getting anywhere with his remarks, he will often drop this mood or attitude and adopt another mood or attitude.

A person with a negative attitude is often playing a role. He may have found that he feels more secure by taking a negative attitude, by being poker-faced, or by being non-enthusiastic. "Pointingup" a problem by asking what he has done or what he plans to do in order to start him talking is often an effective procedure. A teacher also can often combat this initial attitude by not committing himself-by waiting him out, or by presenting both sides of a problem impartially. If such an individual can be motivated to think, the problem he presents is usually decreased.

Learning by doing - -

(Continued from Page 196)

Learning does not end here since the profits are used for such educational activities as a trip to the International Live Stock Exposition in Chicago, sending delegates to a leadership training camp, and recreational trips to a zoo or museum during the summer months.

This is one example of following through with instruction with the thought of getting students to carry out the FFA motto of:

"Learning to Do Doing to Learn Earning to Live Living to Serve."

Editorial - -

(Continued from Page 195)

tations in serving such pupils has been the dependence upon the project concept of supervised farming. On the other hand such boys (and out-of-school young men) can, with the help of the teacher, negotiate opportunities to obtain genuine farming experiences involving the necessary planning, putting plans into operation and the subsequent evaluation which make for effective vocational instruction. Perhaps we even have been handicapping the farm boy in this regard simply because it was relatively easy for him to have a project or in some cases to develop a program of projects. Perhaps the only distinction between boys is not whether they are farm or non-farm but rather whether they are able and willing to develop and carry out a program of planned experiencing as the means by which they will learn vocationally. This concept of supervised farming programs shows promise of being one of our directions W. A. S. for improvement.

Bad is the day for every man when he becomes absolutely satisfied with the life he is leading, with the thoughts he is thinking, with the deeds he is doing; when there is not forever beating at the doors of his soul some great desire to do something larger which he knows he was meant and intended to do.

THE AGRICULTURAL EDUCATION MAGAZINE, March, 1954

Effectiveness of supervised farming programs and other teaching is dependent upon - -

Frequency and pattern of farm teaching visits

E. E. CLANIN, Teacher Education, Purdue University



E. E. Clanin

 $H_{ ext{should the}}^{ ext{OW frequently}}$ teacher of vocational agriculture make teaching visits to the home farms of his students? When should these teaching visits be made in order to be most effective? Any attempt to answer these questions involves an analysis

of the present habits of vocational agriculture teachers as these habits are reflected by existing frequencies and patterns of farm teaching visits.

Purposes of Farm Teaching Visits

Any attempt to evaluate requires that criteria be identified as the basis for beginning the evaluation. Therefore, if farm teaching visits are to be evaluated, it is necessary first to determine what are the primary purposes of vocational agriculture teachers in making them. Some of the purposes easily identified are the following:

To become acquainted with the prospective student of vocational agriculture, his parents and his home environment.

To provide guidance for a student and his parents regarding selection of the vocational agriculture curriculum and to inform them concerning the nature of vocational agriculture courses, including the supervised farming program.

To assist a prospective student of vocational agriculture in the selection of projects and in the planning of a supervised farming program.

To follow-up classroom instruction with additional instruction relating to crucial jobs encountered scasonally in the students' supervised farming programs.

To motivate a student to practice improved farm-job methods which he has studied at some previous time.

To evaluate the effectiveness of your teaching as indicated by the outcomes of the instruction given.

Probably there are other purposes but let us consider the effectiveness of our farm teaching visits by using these purposes as criteria.

Observed Frequency and Patterns

As a preparation for trying to obtain partial answers to the questions which were stated in the first paragraph, let us consider some data which were obtained recently from reports of farm teaching visits made by a selected group of vocational agriculture teachers in Indiana. The data indicate that during the fiscal vocational agriculture teaching years 1950-'51 and 1951-'52 there was a range in frequency of farm teaching visits from one teacher who did not visit eighty-six per cent of his students during one year to a teacher who visited each of his students seven or more times during the same year (this teacher actually averaged slightly more than ten visits per student).

The data indicate that there is much variation in the frequency of visits made and the per cent of the total students visited by individual teachers. Table I, below, contains a summary of farm teaching visit data for twenty-nine teachers, which shows the percentage of students visited 0 to 7 or more times per year. These data were collected over the two year period 1950-'51 and 1951-'52 and the average number of farm teaching visits made per student per year was approximately four visits.

There were also noticeable differences among the patterns of farm teaching visits made by these teachers. Four pat-

terns were identified: (1) a pattern of few teaching visits made largely during the summer months when school was not in session; (2) a pattern of regular teaching visits made to each student each month or each alternate month throughout the year; (3) a pattern of infrequent teaching visits during the regular school term and frequent visits made in the summer months (two or more visits per student per month); and (4) frequent teaching visits made to those students having average or above average opportunity to develop supervised farming programs and infrequent or no visits made to students having below average opportunity for supervised farm practice.

Table I. Summary of Farm Teaching Visit Data for Twenty-nine Teachers of Vocational Agriculture.

| Per Cent of Total students | Times students were visited per year |
|----------------------------|--|
| 18 | 0 |
| 26 | 1-2 |
| 36 | 3-6 |
| 20 | 7 or more |

Some Challenging Questions

The data cited have indicated observable variations among teachers in the frequency of farm teaching visits made and in the patterns of farm teaching visits. The primary question for evaluative purposes is-Can the purposes of farm teaching visits (which were stated earlier as evaluative criteria) be met effectively by teachers who use the frequencies and patterns of farm teaching visits reported? In an attempt at selfevaluating, such questions as the following may well be considered by each teacher of vocational agriculture:

- (1) Is the variation in frequency of visits made to my individual students a natural and to-be-expected condition or is such variation in frequency indicative of some flaw in my philosophy concerning farm teaching visits?
- (2) Is there a relationship between the frequency of the farm teaching visits made and the strength of individual or group programs of supervised farming?
- (3) Is the pattern of my farm teaching visits appropriate for at-



pupil and parents during a visit to the farm.



A teacher explains the concept of Supervised Farming Programs to The most effective discussion of problems arising in supervised farming programs is likely to be possible on the farm.

1954 program of work of the Agricultural Education Division, American Vocational Ass'n.

LLOYD J. PHIPPS, Secretary, Agricultural Education Division, American Vocational Association

THE OPERATING POLICIES for the Agricultural Education Division of the American Vocational Association make provision for five standing committees which report and present plans for the following year at each annual A.V.A. Convention. These committees are:

- 1. Professional Information Committee
- 2. Professional Relations Committee
- 3. Research Committee
- 4. Standards and Policies Committee
- 5. Teacher Education Committee

The following plans of these committees were adopted by the Agricultural Education Division of the A.V.A. at the annual convention in Chicago, November 22-27, 1953.

Professional Information

Within the framework of the operating policies of the Agricultural Education Division of the American Vocational Association, this committee defines its major responsibility as that of coordinating and promoting the production and dissemination of information dealing with professional and institutional materials developed primarily for teachers, supervisors, and teacher trainers in vocational education in agriculture by professional staffs in agricultural education.

After discussing several proposals, the committee presents the following major project for the coming year:

- 1. That a nation wide program be initiated to keep the teachers, and the supervisory and teacher education staffs in the several states informed as to the professional and instructional aids being developed in each state.
- 2. That our professional publication, the Agricultural Education Magazine, be utilized as the vehicle by which this information would be transmitted to those immediately interested.
- 3. That, to implement this program for 1953-54, the following plan be tried as a pilot program:
- a. That the five members of this committee representing the four geographic regions and the Negro region be designated to assume the responsibility for gathering information each month from the states in their respective regions as to the nature of the instructional and professional materials published and in the process of being developed.
- b. That the chairman of this committee serve as a coordinator to receive the listings of the materials compiled by these regional representatives and to transmit them to the editor of the Agricultural Education Magazine for publication in a special section of the magazine to be devoted to this feature each month.
- c. That each state be requested to designate one staff member as a contact

man from whom regional representatives will receive copies of materials to be reviewed, and that these contact men will constitute a regional committee to deal with professional and instructional aids on a regional basis.

- d. That this program be initiated at the regional meetings to be held in the spring of 1954 and that publication in the *Agricultural Education Magazine* start with the July, 1954 issue.
- e. That the information to be made available to the several states about each publication will include to whom it is available, under what conditions it may be obtained, whether or not it may be duplicated, the price to other states, and other pertinent information.
- 4. The committee suggested for consideration that "acceptance or reviewing panels" of teachers be utilized to review projected materials prior to their final publication.
- 5. The committee acknowledges the assistance of Professor Melvin Henderson of the University of Illinois, who met with the committee as a consultant. Respectfully submitted:

Joe Duck—Central Region
R. W. Roberts & J. C. Atherton—
Southern Region
F. McQueen & Arthur Floyd—
Negro Region
Neldon A. Taylor—N.V.A.T.A.
A, W. Tenney—U. S. Office of

Education, Consultant
W. R. Kunsela—N. Atlantic Re-

S. S. Sutherland—Western Region, Chairman

Professional Relations

The project to be undertaken by the Professional Relations committee will be two-fold—

- 1. Survey of working agreements between Vo-Ag and Ag-extension in the several states, to discover how these agreements are working in actual practice, and to select from the survey those practices or techniques which are most successful in bringing about better relations between the two groups.
- 2. Survey of aids and service given by the colleges of agriculture and extension service departments in the various states in the up-grading and in-service training of teachers of agriculture, making this information available to agricultural education workers in each state in order that they might have information which may help them to develop better working relations with the colleges of agriculture and extension service departments in the in-service training of

Another project considered by the Professional Relations Committee was the improvement of relations between the A.V.A. and the N.E.A. No definite the Development of Young Farmer Classes in Vocational Agriculture." It is further recommended that the A.V.A. provide financial support for the initial

procedure for this project was determined. However, since most A.V.A. members are also members of N.E.A. it was felt that something should be done to develop a closer working relationship between general education and vocational education and the organizations representing each.

Respectfully submitted:

- E. P. Hilton—Central Region
- C. B. Jeter-Negro Region
- J. R. Cuffman—N.V.A.T.A. T. L. Devin—N.V.A.T.A.
- C. B. Davenport—Consultant

Research

Activities Planned and Proposals for 1954

- 1. To encourage and assist with the development of research in the several regions.
- 2. To promote research sessions in regional conferences and special research workshops in the regions.
- 3. To compile lists of vocational education studies in progress during 1953-54 for publication in the May, 1954, issue of the Agricultural Education Magazine.
- 4. To assemble copy for Supplement #8 to Bulletin #180, "Summaries of Studies in Agricultural Education," to be published by the U. S. Office of Education.

RECOMMENDATION-It is recommended that, in consideration of the data assembled by the 1952-53 Committee in an evaluation of the use and effectiveness of "Summaries of Studies in Agricultural Education," and in light of agreement in the Agricultural Education Division of the A.V.A., this series of publications be continued on the annual supplement basis that has been in effect during the past five years. Furthermore, because the data gathered from teachers of vocational agriculture show that when and wherever teachers have had access to these publications the bulletins are effectively used for the improvement of instruction, it is recommended that subsequent supplements be printed in sufficient quantities to provide for distribution to present teachers of vocational agriculture, and that every effort be made to make them available as soon as possible after the end of each fiscal year.

5. To organize and provide for the prosecution of the "Experiment in the Development of Young Farmer Classes in Vocational Agriculture" as proposed by the 1952-53 Committee.

RECOMMENDATION-It is recommended that a committee including representatives from the chief state school officers, directors of vocational education, secondary school administrators and supervisors of vocational education in agriculture, be appointed to work with the A.V.A. Research Committee in Agricultural Education, currently comprised of representatives of the Teacher-Training and Vocational Agriculture Teachers' Sections of the A.V.A., to carry out the "Experiment in the Development of Young Farmer Classes in Vocational Agriculture." It is further recommended that the A.V.A.

(Continued from Page 204) organizational steps in the experiment; and that the plans for procedure be made with a view toward the employment of a full-time director for the

ment of a full-time director for the experiment under either A.V.A. or other interested sponsorship.

6. To plan a session on research for the program of the Agricultural Division at the 1954 A.V.A. Convention.

Respectfully submitted:

Henry S. Brunner, Chairman— North Atlantic Region J. Bryant Kirkland, Secretary—

Southern Region
R. E. Bender—Central Region
J. N. Freeman—Negro Region
Leo Knuti—Western Region
Leon M. Johnson—N.V.A.T.A.
H. B. Swanson—Office of Education. Consultant

Standards and Policies

Formation of an Advisory Committee for the Agricultural Education Branch of the U. S. Office of Education.

The following recommendation, presented by the Committee on Standards and Policies for the Agricultural Education Division of the American Vocational Association was passed unanimously at the business session of the Agricultural Education Section of the A.V.A. Convention held at Minneapolis on November 29, 1951:

"The Agricultural Education Division of the A.V.A. goes on record as recommending that an advisory committee be set up to work with the Agricultural Education Service of the U. S. Office of Education."

At the same meeting, the Committee on Standards and Policies indicated that it would be prepared to assist the U.S. Office of Education by making suggestions for the selection and organization of this advisory committee.

At this time the Committee proposes that this recommendation be implemented as follows—

Membership. We recommend that the advisory committee include the following: Two state supervisors of agricultural education, two teacher trainers in agricultural education, one representative of the Negro group in agricultural education, one state director of vocational education, one school superintendent, and one teacher of vocational agriculture.

We suggest that at various times it will be desirable to invite representatives of farm organizations to participate as consultants.

Method of Selection. We recommend that the U. S. Office of Education consider the following method of selection: that state supervisors and teacher trainers be selected at the regional conferences, the Negro representative at their annual meeting, the state director by the directors' organization of the A.V.A., the school superintendent by the American Association of School Administrators, and the teacher of vocational agriculture by the National Vocational Agriculture Teachers' Association.

 $Term\ of\ Office.$ We recommend that each member of the advisory committee

regularly serve for a period of three years and that he be ineligible for reappointment for successive terms.

In order to stagger the terms of the various members, the following suggestions are made regarding the initial term of office of each teacher trainer and supervisor:

Western Region—Select a supervisor to serve a term of two years, followed alternately by a teacher trainer and supervisor for terms of three years.

Central Region—Select a teacher trainer for a term of two years, followed alternately by a supervisor and teacher trainer for terms of three years.

Southern Region—Select a supervisor for a term of three years, followed alternately by a teacher trainer and supervisor for terms of three years.

North Atlantic Region—Select a teacher trainer for a term of three years, followed alternately by a supervisor and teacher trainer for terms of three years.

The initial terms of the state director and teacher of vocational agriculture would be one year each, followed by three-year terms for the representatives selected thereafter. The initial term of the Negro representative would be three years and the school superintendent would serve for two years, each followed by three-year terms for the representatives selected thereafter.

Frequency of Meetings. We recommend that a minimum of one meeting be held per year, preferably for two full working days or longer. In addition, it may be feasible to hold meetings during the annual convention of the American Vocational Association.

Finances for Meetings. We recommend that the expenses of members of the advisory committee in attendance at the annual meeting be paid through funds provided by the Vocational Division of the U. S. Office of Education.

Committee for Institutional On-Farm Training. The Committee on Standards and Policies recommends the authorization of a special committee for Institutional On-Farm Training, with the following membership:

A. P. Fatheree, Mississippi J. E. Hill, Illinois Byron McMahon, California Cola Watson, Vermont (Chairman) Respectfully Submitted:

George P. Deyoe, Teacher Trainer, University of Illinois (Chairman)

Ernest M. Norris, Teacher Trainer, Prairie View College, Texas S. F. Peterson, Teacher, Ayden, North Carolina

R. C. S. Sutliff, Chief of Agricultural Education, New York

(Burt L. Brown, Washington, and R. D. Anderson, South Carolina, were absent)

James H. Pearson, Acting Assistant Commission for Vocational Education, Washington, D. C., consultant

Teacher Education

The senate committee on standards for institutions training teachers of agriculture appointed by the Land Grant College Association has led the way in developing criteria for evaluating training programs in technical agriculture, It is imperative that we continue to have close working relationships with this group which operates under the chairmanship of Dean Verne Freeman of Purdue and in cooperation with another Land Grant College Committee under the chairmanship of Dean Gordon Cairns of Maryland which is concerned with resident instruction in agriculture. The secretary has attended four meetings of the Land Grant College committee as a representative of the A.V.A. committee on teacher education. We are in a position to be of help in strengthening programs of instruction in the Land Grant Colleges. This the committee proposes to do. We are assured of the friendly cooperation of the Land Grant College Committee.

We urge study of the criteria which the Land Grant College committee developed. We urge that suggestions for their revision be sent to the chairman, Mr. V. G. Martin of Mississippi. Copies of the criteria are available through your Dean of Agriculture.

The plan of work for the committee is established as follows:

- 1. Prepare a statement of principles for vocational agriculture as a basis for a similar statement for training teachers of vocational agriculture.
- 2. Suggest revisions and adjustments in the criteria prepared by the Land Grant College Committee.
- 3. Prepare a set of standards or criteria for the professional preparation of teachers of vocational agriculture.

Respectfully submitted:

V. E. Martin, Chairman—Southern Region
Milo J. Peterson, Secretary—Central Region

R. L. Cline—Western Region Arthur Ahalt—North Atlantic Region

gion
W. F. Hickson—Negro Region
Robert A. Wall—N.V.A.T.A.
H. B. Swanson—U. S. Office of
Education, Consultant

Themes for Volume 27

Volume 27 of the Magazine, beginning with the issue of next July, is just "around the corner" for your Editor who must have copy for July on hand in April.

The themes for July and August respectively are: July—Improving Public Relations through Fairs, Exhibits, Demonstrations, Tours and Contests. August —Preparation for Citizenship through Vocational Agriculture—recreation, leadership training, cooperation, health, civic responsibilities, etc.

Give some thought to each of these themes and send in your contributions to each which may help your fellow teacher in his program. Deadlines are the first of April and May respectively. Themes for future issues will be announced later.

—Editor

Interesting, Informative and a Basis for counting our Blessings, is Dr. Anderson's - -

Rural Britain as I saw it

Pennsylvania State University



C. S. Anderson

RURAL Britain lis changing as are British farming practices, but at the present rate of progress they still have a long way to go before reaching American standards. There are fewer thatched roofs. Sod hedges and stone fences are gradually disappearing. Fields

are squarer. But even now within thirty miles of Piccadilly Circus, the heart of London, there are rural inhabitants who still light paraffin oil lamps when darkness comes, who collect rainwater in wooden tubs for the Monday washing, who kneed and bake their "daily bread" in ancient sculleries, and who greet you with an almost understandable Devon burr. This is a part of the rural Britain I saw while living a year in the United Kingdom as a Fulbright research pro-

The research project which I proposed and which won the Fulbright appointment came under what the British choose to call Rural Adult Workers Education, There is no counterpart for American Agricultural Education in Britain, certainly no counterpart for a professor of Agricultural Education. I tried to discover how agricultural problems are brought to the attention of research agencies, how farmers are informed of the results of research, the extent to which research outcomes are applied, and the manner of their application to the farming problems. In America the answers would be obvious, but not as apparent in a country that has nationalized its agriculture and its education, just as it has nationalized its coal mines, railroads, hospitals and scores of other institutions and services. It must be remembered that Britain today, in my judgment, is a welfare state. There is a dictated, one-pattern approach to the education of the man on the land.

An Experience in Research

My first problem was to visit all the major agricultural experiment stations, bring myself up-to-date on completed studies, and ask about the agricultural research in progress. My entree was through the Ministry of Agriculture in London, now the fount of most edicts affecting the farmer, said edicts moving down as it were to the grass roots level through a highly organized, inefficient, and greatly over-staffed National Advisory Service. Finally, fortified with a location-sampling of farmers and crofters extending from Land's End to John O' Groats and across the Irish Sea, I There is almost a complete absence of

was ready to work. That is after a few driving lessons to learn to keep on the wrong side of the highway and to finagle an English car through narrow country lanes. The Romans built the last good roads in Britain and that

was quite some time ago. The interviewing of approximately 400 English, Scottish, Welsh, and Irish farmers required the greater part of the year. It was the most interesting bit of research I have ever undertaken.

I made my own travel schedule.

Theoretically, I was a member of the staff of the University of Reading, but I actually spent only about three months of the year there. At Reading I experienced the slow, measured tempo of English campus life. There I participated in faculty and student activities at Britain's newest and largest college of Agriculture. They made me an honorary member of the Upper Commons Club where I whiled away long hours sipping tea and nibbling biscuits with agriculturalists and visiting scientists from other parts of the United Kingdom, the Commonwealth, and foreign countries. I had no assigned teaching except as I counseled advanced students in their research problems. It seemed to me that I spent most of the time answering their questions about America.

I am more concerned in this article with conveying my impressions of the rural British and of British farming than in relating the results of my study. A research abstract is being published abroad, and the complete study may eventually be printed in this country.

Prosperity and Frustration

Never in all history have British farmers been as prosperous or enjoyed so many of the good things of life as today, but neither have they felt as frustrated and as uncertain of their future. The nationalization movement may be bringing about greater farming efficiency, but through standardization much of the carefree, picturesque agrarian life of Britain will disappear.

New, but far from modern, barns and houses constructed according to government plans and specifications and largely financed by the government are springing up all over the countryside. They are proof that the British are a conventional, conservative people, and of how deeply they resist change. Central heating is still regarded a luxury for farm homes.



Among these rugged heather-clad hills thousands of hardy Scots herd their flocks in summer, and during the long dark days of winter weave the world-famous tweeds.

modern plumbing. The new barns are not unlike those built in America fifty to one hundred years ago. It is the exception to find milking machines and similar modern installations. Dairy herds are small and hand milking, performed mostly by women, is still the practice. In some open-country secondary schools there was a special curriculum for "dairy

Britain has scarcely made a beginning with mechanized farming. The fields are small and irregular. Sometimes I wasn't sure whether the hedges divided the fields or the fields divided the hedges. Much of the land is rolling and stony. Hand labor is plentiful and cheap. About the only piece of modern farm equipment in which I could interest farmers was the hay dryer. Rarely are there two successive clear summer days and the natural drying of hay is practically impossible. Pit silos are common. They fill them with grass. There is no maize grown in Britain. They confused me by calling everything else corn, including barley, rye, wheat and oats.

Control by Government

The British farmer has only one buyer for his produce—the government. When I asked dairymen where the milk produced on their farms was sold and consumed they could not tell me. All they knew was that a truck owned and operated by the Ministry of Agriculture stopped and collected the milk, and at the end of the month they received a check, less their income tax. Our complaints about government controls and price-fixing are nothing to the grievances of many British farmers.

Rationing extends to animals as well as humans. Farmers are compelled to keep careful production records. On the basis of animal production records, coupons permitting the purchase of supplementary rations for the animals are issued. Under the existing crop rotation system no British farmer can produce enough grain to maintain his animals. The supplementary feed is imported. When the government analyzes the production and feed records and decides that a cow is no longer an efficient producer, the farmer is ordered to sell her. He has no choice in the matter. The

(Continued from Page 206) government sets the price for the cow, and the government buys the cow.

Farmers must account to the government for all the produce of their farms. They must secure a permit to use more than a stipulated amount for home consumption. Always a permit is required to kill an animal. A clause in the law allows them to have an animal that dies by accident. Judging by the amount of mutton on most farmers' tables, I concluded that a sheep just wasn't safe anywhere if a farmer and his family really needed meat. In reality the laws designed to control food production and distribution are practically ineffective.

Farmers and others may keep up to twenty-five hens and may sell privately the produce of the flock, but unless they choose to submit production records and sell the eggs to the government they cannot draw feed rations for their twenty-five hens. Neither is it legal to feed the hens unreported home-grown grains. Mrs. Anderson and I received ration coupons allowing us to buy two eggs per week each from the government egg pool. Beyond this we had to depend on those 25-hen flocks and pay black market prices.

Uncertainty of Tenure

The government sets up production goals for all types of farms and farming localities. All farms are rated annually, and if the production drops below a stipulated minimum the farmer is placed on probation. For the next year his farming activities are closely supervised by a Ministry of Agriculture committee. He is advised on ways and means of improving his farming practices. If at the end of the year he still does not meet the production goals, or show marked improvement, he is declared an inefficient farmer, and forced to give up his farm. He is paid for it on the basis of a government appraisal. The government has a long list of approved farmers who want farms and promptly sells the farm to one of them. War veterans have priority. About 5% of the farmers lose their farms each year. The dispossessed owner is usually offered a job as a laborer for the new owner, but I did not hear of any who accepted. Frequently they experience great difficulty finding other employment. The younger men usually gravitate to the mines or the factories.

The seizing of farm lands is a political issue in Britain. One large socialist paper carries a caption, "Laggards of the Land," a sort of blacklist of inefficient farmers. The Conservative Party papers point out the unfairness of the scheme, circulate petitions to reinstate farmers, and even urge them to carry their grievances to Queen Elizabeth.

Hope Rests with the Youth

My hopes for the future of Britain brightened when I was with the rural young people. I frequently addressed Young Farmers Clubs, Britain's nearest approach to our Future Farmers of America, often speaking on the subject, "This Is Pennsylvania" and supplementing my remarks with colored slides. There is a tremendous curiosity about

America among the youth of Britain, I am afraid too many of them want to immigrate to America for the good of their own country. In Ireland I seldom met an enterprising farm boy who did not admit that his sights were on the U.S.A. Ireland's age old problem has been to find ways of interesting its finest young people to remain in Ireland.

The Young Farmers Clubs are largely for social purposes. They have debates, quiz programs, public speaking, and lots of dancing and eating. Like our FFA they go in for contests. I officiated at one which was new to me, a Young Farmers Club turnip hoeing contest in Scotland.

The young people are generally realistic about the fall of the British Empire. Most older folks are not. They live in sort of a golden pre-war past. The parents may be content to spend long hours hoeing acres of crops that might better be cultivated mechanically, and knocking potato bugs into a can instead of spraying the field, but the young generation has different ideas. The Young Farmers Clubs exemplify this spirit of change and progress, and will have a real and lasting influence on the agrarian future of Britain.

The English have a subtle sense of humor. You must listen for it, wait for it, but it does come. In a country inn four of us in succession ordered leg-ofmutton. Collecting the menus, the waitress commented, "You gentlemen are sure hard on an old ewe. You haven't left the poor beast a leg to stand on."

Nationality Influences Vary

The Irish are the poorest, the best looking, and the happiest of all the British. Mrs. Anderson and I will never forget a two hour ride on a rural school bus, observing and listening to the next generation of rural Irish. The last youngster delivered and nothing more to do for about seven hours, the driver insisted on taking us to a country pub for a drink and toast to America. We drank Irish squash, a sort of homebrewed root beer. The name of the pub was Beauty Unadorned. That's Ireland!

The Welsh are law-abiding. At least they are a law-enforcing people. My only brush with the police was in a Welsh village. I returned to our car just as a "bobby" was giving me a ticket. I remonstrated in my harsh American tongue, and he came back at me in Welsh Gaelic. We weren't getting anywhere, but the longer we both sputtered the friendlier we became. Finally, we decided we really liked each other, but we weren't to like each other long if he didn't take back the ticket, and if I didn't get my car out of there. That's exactly what happened.

The Scots are the human dynamos of Britain. Up at the crack of dawn they are off to the fields with their flocks while most Englishmen are still diddling over tea and biscuits. I gave up trying to arise early enough to reach the Aberdeen quay in time to go out with the fishermen. By the time I arrived they were usually unloading kippers by the

I have never before seen farmers who

Guest Editorial - -

(Continued from Page 195) Your program need not become academic. Your farm boys need not suffer. You need not carry along town boys without interest in Ag. You need not insist they take Ag. But, you should not refuse those interested in Ag. the opportunity to learn more about it.

Incorporating in your program a good lesson on the history, importance, and economic problems of agriculture could build excellent good will over the years —and it wouldn't hurt farm boys, either.

2. Discard the theory that your foremost and only objective in Vo-Ag should be to provide the basis for sound training and establishment in the business of farming.

I hold to the opinion that many farm hovs who take Vo-Ag will not farm. Many of them will never have an opportunity to farm. Many will seek employment in industry.

The field of agriculture is tremendous. It is not limited to farming alone. As we have become more specialized in agriculture, many allied industries and trades have sprung up around the business of farming.

Agriculture depends on industry, too. Your leaders today recognize the obligation industry has to agriculture, for they continually seek to enlist help and financial aid of city industrialists to further your program.

In the future, we will need many sound, sincere, and trustworthy men to lead and work in these industries. Many of them will, naturally, come from the farm and rural areas.

Therefore, it will be a challenge to change your thinking somewhat and determine how this great Vo-Ag program might serve to a higher degree, not only agriculture, but the needs of associated industries.

In such circumstances, a supervised farming program need not be abandoned but can be strengthened instead. Perhaps, first, we should change the name to a supervised agricultural program.

For instance, what would be wrong (Continued on Page 208)

could make so much out of so little as do the Highlanders. Their heather-clad hills are stony and difficult to farm. Their growing season is short and winters are severe. Oats, potatoes and hay are the principal field crops. The quality of Highland wool is unsurpassed, and some of the finest beef cattle in the world are found in Scotland.

During the long winter months a crofter and his family, working by a glowing peat hearth weave the famous Scotch tweeds. The Lowlands produce the porridge for Britain and for a lot of the rest of the world. Men are still Scotland's number one export. Forty-five times as many Scots live in other parts of the world as there are living in Scotland. The exodus is mostly from the

I expect it is true, "There will always be an England," but I came home convinced that there will always be a better America.

livestock projects also showed the greatest difference between crop and livestock ratings. Teachers of vocational agriculture

claimed that it is more difficult to promote crop projects because of (1) scarcity of land, (2) lack of student interest in crops, and (3) lack of equipment needed for crop projects. Those teachers recommending that the number of crop projects be increased, suggested the following ways of doing so: (1) the use of school farm laboratories, (2) more parent-and-son partnerships, (3) more class time spent in teaching about important crops in the community, (4) more recognition of students with good crop projects, (5) exhibition of crop enterprises at fairs and shows, and (6) more financial aid for crop projects.

Teachers' Opinions

Toward the end of the questionnaire teachers were asked to discuss whether crop or livestock projects should be increased in their supervised farming programs and why. A great majority of the teachers responding to this unstructured question expressed that the number of crop projects should be increased. One of the teachers observed the following to be true in a number of departments vocational agriculture:

"In too many cases students live on crop farms and have livestock projects. Doesn't make sense. They later go into crop production—our records prove it."

The observation made by this teacher vocational agriculture in California in agreement with the findings of three different phases of this study, namely, (1) the historical development, (2) the study of the records, and (3) the results from the questionnaire. The most surprising fact revealed by this study is that this situation has existed and has become progressively worse for some twenty years.

tribute to the improvement of farm business practices on my home farm and in my community?

- 3. Will my program contribute to the improvement of farm living on my home farm and in my community?
- 4. Will my program grow and expand
- and is it sufficiently comprehensive?
- 5. Will my program lead to establish-
- ment in farming? 6. Will my program assist in establish-
- ing good relationships with my fam-
- 7. Will my program provide opportunity for me to work with desirable agricultural agencies and with other
- Will my program assist in carrying out desirable conservation practices of soil and other natural resources?

9. Is my program of sufficient scope to be challenging yet not too burdensome to prevent desirable school and community activities?

A new twist in supervised farming

HUBERT WELTON, Vo-Ag Instructor, Kearney, Nebr.



Hubert Welton

ideal!

nance.

beef prices.

new twist to ten per cent of his mother's share of A new the supervised the farm income. He rents a few acres of land on a 60/40 basis for a crop farming program project. is being tried in one of the voca-In conclusion it is definitely felt that tional agriculture this system will work exceptionally well departments in Nebraska. The system was questionable at first but it has taken shape

as a program of

high merit and

presents an oppor-

tunity for teaching

real farm problems on an over-all basis

in an actual farm situation. Thus the

A member of the Kearney Chapter of

Future Farmers of America whose

father was in poor health and whose

brother was subject to the army's

cadence count took over, as nearly as

possible, the home farm on the basis of

receiving five per cent of the total farm

net income. The boy keeps an accurate,

complete set of farm records, using the

"Better Farm Accounting" system which

is distributed by the National Farm Loan

Association. His father contributes as

much labor as possible when able, help-

ing with the chores and general mainte-

The farm is comprised of a dry land

unit of 430 acres. The enterprises are

50 beef cows, 250 laying hens, 18 acres

of corn, 70 acres of small grain, 110

acres of hay with the balance made up

of pasture, two farmsteads and waste

The income for the boy in his first

year was approximately \$300.00 whereas

his second year was \$250.00. This drop

can be accounted for by the drop in

Advantages

program are a complete, accurate set of

records, record analysis, records kept

on an annual basis, no unpaid or un-

accounted feed or operation costs

omitted as are commonly found in some

FFA record books, income tax reports

made by the youth from the records,

wide range of farm experience offered,

personal money interest in economy of

costs and operations on all enterprises.

and most of all a real personal interest

in the study of all phases of agriculture

rather than with one or two crops or

Limitations

of record keeping is too far advanced

for the average vocational agriculture

student, improvements suggested must

go through several channels before ap-

plication, and the lack of an individual

project to compare with other students.

This last possible weakness doesn't exist

in this case because the boy does have

an individual project in addition to the

Weaknesses noted are that this type

livestock enterprises.

Some of the strong features of the

in selected cases and should occasionally be used. Its use, however, should be limited to a few because the management decisions which are so important in learning might easily be dominated by a father or mother rather than left up to the boy. The boy in this case definitely helps in making the decisions and his growth towards developing into a future farmer is rapid and sound,

The agreement between the boy, his father and brother is an important item in this case. It is reproduced here as an example of a desirable precaution to take in planning such supervised farming programs,

Partnership Agreement

Between Frans Anderson and his sons Richard and John Anderson. The business of this partnership shall be general farming and stock raising. The place of business shall be the N.E. 1/4, S.E. 1/4 and L. 13-14-23 and 24 of Section 19, Twp. 9-Range 16 in Buffalo County, Nebraska; and shall include any other land leased or purchased.

Frans Anderson shall contribute to this partnership 480 acres of land, farm equipment, including new equipment, a herd of approximately 50 cows and one bull, a flock of hens and labor.

Richard Anderson shall contribute one cow, one heifer calf and labor. He shall be reimbursed for this cow and calf at time of dissolution.

John Anderson shall contribute labor and shall also keep records of farm

The total net income shall be divided

| 50% | Frans Anderson | investment |
|-----|-------------------|---------------|
| 25% | Frans Anderson | labor |
| 20% | Richard Anderson. | labor |
| 5% | John Anderson | labor and |
| | r | ecord keeping |

These percentages may be changed from year to year to correspond to the amount of labor contributed.

Richard and John shall not pay board and room, but shall assume their own school and personal expenses. Mrs. Anderson shall have free use of dairy, poultry, garden and farm produce for use on the family table, which will be recorded. While John is in high school he shall have the total cash income for any small garden or other small projects he may undertake,

This agreement shall be effective from January 1, 1951, until dissolved by mutual agreement.

Signed

Frans L. Anderson Richard L. Anderson John L. Anderson

Guest Editorial - -

(Continued from Page 207)

with a supervised program for a Vo-Ag student in agricultural public relations? What would be wrong with a supervised program on agricultural farm programs?

There is a tremendous opportunity

3. Drop the dollar sign!

When it comes to publicizing the work of vocational agriculture and FFA activities, drop the dollar sign completely,

I mean it. Get rid of it. Don't mention

I believe that the continual mention of dollars, winnings, net worth, earnings, and the like can do more harm to agriculture as a whole and your local program than any other type of publicity.

Don't base a boy's accomplishments on the dollar sign. Don't base your local. state, and national publicity on the dollar sign. The value of your program isn't in the dollar. It is in what you can do for boys.

This statement appeared in a feature story on the Kansas City Star during the past National FFA convention. In part it read "shows his earnings, from farming, including increases in the value of his inventory, to be more than \$70,000."

True, the figure is correct. The FFA boy is justified in having that amount of worth.

But is it good public relations? I doubt it. When the laboring man and lots of other city people read that story, they have one reaction-and that's not good for your program or for agriculture.

A dollar figure, in almost all instances, is not representative of the average Vo-Ag boy and his earnings in your program. Where the tendency is to build publicity and stories around what is earned, the result is often a distorted picture of vocational agriculture.

The real value in your program is not dollars. It lies in the fact that teachers through the program have raised the standards of countless thousands of boys, and developed within them a foundation that will make them better citizens and better men. They will have a wholesome understanding for agriculture and its problems.

Three points-three challenges. Vocational agriculture is growing, it will continue to grow. It is serving, and it will continue to serve.

May it continue to prosper, and to serve not only the farm people and the business of farming, but agriculture as a whole. May it contribute to a wider understanding and appreciation of the entire nation toward farm people and agriculture.

The latest official count of subscriptions to the Magazine totals 9,154. How nearly does this number account for all of the workers in Agricultural Education? If we are not reaching all of our potential subscribers, why not? This is your Magazine. How can we reach all the persons it seeks to serve?

Teacher and Pupil Activities which lead to --

C. E. RICHARD, Teacher Education, Virginia Polytechnic Institute

ing better farming

supervised farming programs

Building better

programs. There is no short cut to this

task. It takes time, planning, patience

and a lot of good teaching to have

strong farming programs. Some of the

practices and procedures used by suc-

1. Visit prospective students and their

parents on the home farm and explain

the program. The teacher should visit all

prospective students and discuss the pro-

gram of vocational agriculture with

them and their parents. An understand-

ing of the program is most important.

On these visits the teacher can also

determine the boy's opportunities on the

farm, the degree of cooperation between

the boy and his parents, the boy's inter-

ests, likes and dislikes, and other items

that may help when programs are se-

2. Have a meeting of all new students

and their parents at the beginning of

school. This meeting is valuable in get-

ting across a more thorough under-

standing of the program to both students

and parents, and to give them an oppor-

tunity to ask questions and discuss the

3. Make survey of student's home

farm. A complete and accurate farm

survey properly analyzed will provide the

best possible information to use in

determining farming programs. It will

help the all-day student, his parents, and

the teacher to obtain a better under-

standing of the farm situation, available

resources and farm potentialities. It is

a most valuable guide in determining

what to teach the members of the family

during organized classes or on-farm in-

struction, and can be used as a basis

for developing a constructive program

Use Class-time

of farm improvement.

lected and planned.

program,

cessful teachers are as follows:

Assuming that ing the farming program, selecting programs and preparing business agreements are valuable stepping stones to grams are valuable successful programs. In order to teach in training stuthese units successfully the teacher must dents in vocational first familiarize himself with the existagriculture and ing situation, problems, and strength of that good proeach student's home farm operation. grams provide bet-On the basis of this information he can ter training than provide group and individual instruction poor programs, based on problems which students have then teachers are on their farms. constantly being 5. Have students study successful confronted with the task of build-

- brograms. This is valuable for all students. Seeing and studying outstanding programs is motivating as well as informative. Well planned field trips to a successful program is time well spent. I'm sure there is a State or an American Farmer in reach of each department which may be visited and studied.
- 6. Analyze and study records of farming programs. New students can profit greatly by studying records and practices followed by older successful students. Older students should analyze annually the records and practices of their own programs and use this information for making improvements.

Develop Objectives

- 7. Have students set up objectives for their own programs. From an educational standpoint the best objectives are the objectives of the individual student. We want students to set up and evaluate their own objectives. Goals or objectives help students to understand the purpose and value of approved practices. Motivation is provided in comparing results with goals and with achievements of others. Purpose and meaning are given to summary and analysis of practices used and records of programs. Objectives or goals should not be limited to amount produced or total production but to efficiency of production. Once a student understands that certain efficiency factors have a direct bearing on profit he is ready to study the factors and to set up for himself reasonable and definite goals.
- 8. Have students evaluate the programs they select. It is generally agreed that evaluation should be done largely by those who are affected by a program. If we can get students conscientiously to evaluate their own programs much more interest will be shown and more adequate programs result.

4. Teach lessons on supervised farming to all students. Teach new students from the standpoint of selecting and planning new programs-older students from the standpoint of revising and improving programs based on their past experiences. Teaching such units as developing an understanding of the Supervised Farming programs, mapping the farm, making farm surveys, financ-

Criteria for Evaluation

The following questions or similar ones may be used by a student in evaluating his own program:

- 1. How well does my program fit in with the farm business practices and farming needs on my home farm and in my community?
- 2. How much will my program con-

Agricultural curriculums in the junior colleges*

Emphasizing their content and organization

curriculum majors.

education units required of junior col-

lege agricultural students were in the

areas of physical education; English and

U. S. Government and History. Art and

Music, on the other extreme, were re-

quired by less than one per cent of the

Related Courses

agricultural curriculum should be allo-

cated to "related courses." The distinc-

tion between "general education" courses

and "related" courses is admittedly diffi-

cult to define, since every worthy course

properly taught has some general edu-

cational value. Therefore, for the pur-

poses of the C.A.T.A. study, an arbi-

trary distinction was drawn, "related"

courses being considered those which

build for the agricultural major a

scientific, mathematical, mechanical, or

What percentage of the junior-college

LOREN D. PHILLIPS, Coordinator of Agriculture, Chico State College, Chico, California



Loren D. Phillips

THE previous article in this series dealt with the philosophy of the junior-college agricultural curriculum, its objectives and purposes; curricula and course-offering criteria; its construction and revision; facilities nceded to support it; and, the teach-

ing methods, practices and techniques employed in its presentation. This article is primarily concerned with the Junior College Agricultural Curriculum per sc.

Liberal Arts and General Education

What is the place of liberal arts and general education courses in the juniorcollege agricultural curriculum? This is a very debatable issue. Probably one of the better statements has been made by the President's Commission on Higher Education. It reads:

Semi-professional education should mix a goodly amount of general education for personal and social development with technical education that is intensive, accurate, and comprehensive enough to give the student command of marketable abili-

In the C.A.T.A. Survey, the main question was that of determining how much time could be allocated to this type of education without jeopardizing the occupational training effectiveness of the two-year terminal agricultural curriculum. The mean of the opinion ratings indicated that 23.9 per cent of the curriculum's total units should be comprised of such education.

Operational data revealed that the average per cent of units devoted to general education by non-Smith-Hughes programs was 26.3 per cent and by Smith-Hughes departments, 23.4, for a combined average of 24.3 per cent. This close agreement between opinion and operation suggested the perpetuation of the status quo.

Of the general education courses required or suggested for junior-college agricultural curriculums, both terminal and transfer; Physical Education, with 84.6 per cent, was the most frequently listed. Other courses which were most widely required or suggested included

*The second of two articles on this subject.
The first appeared in the February issue,—Ed, President's Commission on Higher Educa-tion, Higher Education for American Democracy (6 Vols.; New York: Harper and Brothers, 1947).

21bid., p 69.

physical sciences, business and commerce, economics, engineering and mechanics, and mathematics. The all-day personnel (administrators, U. S. Government, 66 per cent; U. S. History, 41 per cent; English Composition, 57 per cent; Public Speaking, 23 per cent; and Fundamental English (grammar, composition, and rhetoric), 20 per cent. Thus, it is readily seen that the great majority of the general-

agricultural department heads, and agricultural instructors) gave an opinion mean of 21.1 per cent as the portion of agricultural curriculum time which should be devoted to related course work, Actually, non-Smith-Hughes departments required an average of 21.6 per cent related courses to only 18.7 per cent for Smith-Hughes departments, this 2.9 per cent difference representing approximately two semester or three quarter units less of related course requirement for the latter.

development of a better understanding

of agriculture as a vocation. Specifically,

the subjects designated as related courses were located under the following group-

ings: Science, psychology, forestry,

The combined Smith-Hughes-non-Smith-Hughes mean of 21.0 per cent was almost identical with the opinion mean of 21.1 per cent, suggesting a maintenance of the status quo.

The most frequently suggested or required related courses of all juniorcollege agricultural curriculums were: General Botany, with a 42.9 per cent listing; General Chemistry, with 38.4; General Zoology, 28.8; General Biology, 26.0: General Inorganic Chemistry, 19.2; Organic Chemistry, 17.6; General Physics, 16.4; College Algebra, 15.6; Plane Trigonometry, 14.0; Accounting, 12; and Commercial Law, 10.4 per cent.

The consensus of opinion expressed was that related courses are basic; that economic background, thus aiding in the a background in theory, principles and

Table 1.* Most Frequently Offered Agricultural Courses in Ninety-six United States

| Group and Title of | Number Courses ffered | Average Number Units Per Course | Total Semester Units Offered |
|---|-----------------------------|--|---------------------------------------|
| General Agriculture | | | |
| General Agriculture | 40 | 4.2 | 168.0 |
| Animal Sciences | | | |
| Feeds and Feeding. | 43 | 3.0 | 129.0 |
| Breeds, Breeding, and Animal Improvement | 21 | 2,9 | 61.0 |
| Breeds, Breeding, and Animal Improvement Animal Hygiene, Sanitation and Diseases | 19 | 2.4 | 45.6 |
| Judging and Selection | . 12 | 2.5 | 30.0 |
| Animal Nutrition | . 10 | 2.9 | 29.0 |
| Animal IIusbandry | | | |
| General Animal Husbandry | . 31 | 3.4 | 105.4 |
| Swine Husbandry and Production | | 2.8 | 39.2 |
| Beef Cattle Husbandry and Production | | 2.3 | 39.1 |
| Small Animal Problems and Projects | | 3.0 | 39.0 |
| Introductory Animal Husbandry | 12 | 2.9 | 34.8 |
| Sheep Production and Husbandry | | 2.6 | 28.6 |
| Dairy Cattle Husbandry | | | |
| General Dairy Cattle Husbandry | 64 | 2.9 | 185.6 |
| Dairy Herd Management | 14 | 2.7 | 37.8 |
| Introductory Dairy Cattle Husbandry | 11 | 2,2 | 24.2 |
| Dairy Problems and Projects | | 3.0 | 24.0 |
| Dairy Industry and Manufacturing | | | • |
| General Dairy Industry and Manufacturing | 18 | 2.4 | 43.2 |
| Dairy Standards, Tests, and Testing | | 2.6 | 36.4 |
| Poultry Husbandry and Processing | | | |
| General Poultry Husbandry | 77 | 3.2 | 246.4 |
| Poultry Farm Management | | 2.8 | 25.2 |
| Introductory Poultry Husbandry | 6 | 3.9 | 23,4 |
| Poultry Problems and Projects | 19 | 1.1 | 20.9 |
| Poultry Disease, Parasite, and Pest Control | 9 | 2.3 | 20.7 |
| Poultry Breeding | | 2.3 | 20.7 |
| Plant Sciences | | | |
| General Plant Sciences (Agronomy and | | | |
| Vegetable Crops) | 2 6 | 3.0 | 78.0 |
| (Table continued on Page | 211) | | |

THE AGRICULTURAL EDUCATION WAGAZINE, MUCH, 170

Table I. (Continued)

| Group and Title | otal Number of Courses Offered | Average Number Units Per Course | Total Semester Units Offered |
|---|--------------------------------------|--|---------------------------------------|
| Crops Production | | | |
| Crops, general | | | |
| General Crops Production (Agronomy and Vegetable Crops) | 22 | 3.0 | 66.0 |
| Agronomy Crobs | > | | 1150 |
| General Agronomy | 38 | 3.1 2.9 | 117.8 84.1 |
| General Field CropsForage Crops | 29 17 | 2.9 | 44.2 |
| Vegetable and Truck Crobs | | | |
| Commercial Truck Crops | 13 | 3.5 | 45.5 40.0 |
| General Vegetable Gardening | 16 7 | 2.5 3.2 | 22.4 |
| General Vegetable and Truck Crops Horticulture | , | 0.2 | |
| Horticulture general | . 10 | 27 | .51,3 |
| Propogation and Nursery Managemen General Horticulture | t 19 8 | 2.7 2.6 | 20.8 |
| Fruit Crops | | 2,0 | |
| Fruit crops, general | | 2.0 | 22.2 |
| General Fruit Crops | 8 | 2.9 | 23.2 |
| Deciduous fruit production General Deciduous Fruits | 19 | 3.3 | 62,7 |
| Orchard Management | 4 | 3.0 | 12.0 |
| Subtropical horticulture | | 27 | 32.4 |
| General Citrus Production | 12 6 | 2.7 3.0 | 18.0 |
| Viticulture | | 0.0 | 10.0 |
| General Grape Production | 3 | 2.7 | 8.1 |
| Ornamental Horticulture | | 25 | 32,5 |
| General Landscape Gardening | 13 11 | 2.5 2.9 | 31.9 |
| General Ornamental HorticultureGreenhouse Management | 10 | 3.0 | 30.0 |
| Greenhouse Floriculture | 11 | 2.6 | 28.6 |
| General Floriculture | 9 | 3.0 2.5 | 27.0 25.0 |
| Ornamental Horticulture Plant Materials_ Nursery Management and Operations | 9 | 2.7 | 24.3 |
| Nursery Practice | ð | 2.8 | 22.4 |
| Floriculture Workshop and Practice | 9 | 2.3 2.2 | 20.7 19.8 |
| Flower Shop Operations | 9 | ۵.۵ | 19.0 |
| Conservation, Forestry, Range Management, and Wildlife Conservation | | | |
| Soil Conservation | o | 2.5 | 20.0 |
| General Soil ConservationSoil Conservation Engineering | | 2.0 | 12.0 |
| Wildlife Conservation and Manageme | nt | | |
| General Wildlife Conservation | 5 | 2.5 | 12.5 |
| Forestry Agricultural Forestry | 13 | 2.8 | 36.4 |
| General Forestry | | 2.8 | 33.6 |
| Ranae Manaaement | | 2.7 | 16.0 |
| General Forestry | 12 | 2.7 | 16.2 |
| Soil Sciences General Soil Science | 35 | 3.4 | 119,0 |
| Soil Management | 8 | 2.9 | 23.2 |
| Soils and Soil Management | 0 | 3.7 2.2 | 22.2 17.6 |
| Soil Technology | | 3.7 | 22,2 |
| Soil Technology | 8 | 2,2 | 17.6 |
| Agricultural Engineering and Farm Mechanics | S . | 2.0 | |
| Agricultural Engineering and Farm Mech | anics 33 | 3.0 2.7 | 99.0 78.3 |
| Farm MachineryGeneral Agricultural Mechanics | 27 | 2.1 | 56.7 |
| Farm Welding | 16 | 2.4 | 38.4 |
| Farm Power | 9 | 3.1 2.4 | 27.9 24.0 |
| Farm Power Machinery and Mechanics Farm Buildings | 10 8 | 2.2 | 17.6 |
| Farm Electricity | .,8 | 2.2 | 17.6 |
| Farm Carpentry | 10 | 1.6 | 16.0 |
| Farm Machinery Repair and Service | 7 | 2,2 | 15.⁴ |
| Plant Protection General Insects and Insect Control | 14 | - 3.0 | 42.0 |
| General Plant Protection. | ······ 7 | 2.6 | 18.2 |
| General Plant Pathology | 5 5 | 2.4 1.6 | 12.0 8.0 |
| General Weeds and Weed Control | | 1.0 | 0.0 |
| and Salesmanshib | | | ^ - - |
| General Farm Management | 34 | 2.8 2.8 | 95.2 61.6 |
| General Agricultural Economics | 10 | 2.6 | 26.0 |
| Miscellaneous Aaricultural Courses | | | - |
| Farm Butchering, Meats, and Meat Cutting Supervised Farming Programs | ng 7 | 2,3 1,0 | 16.1 10.0 |
| U wind Forming Programs | 10 | 1.0 | 1,01 |

*Titles are on the basis of course content, rather than actual titles used in the junior colleges.

(Continued from Page 211)

science is needed to make students resourceful and adaptable; and that such training is a necessary aid to agriculture. The minority felt that such courses are not essential to the education of terminal students and that most of the terminal students cannot understand chemistry, physics and mathematics anyway.

Agricultural Majors

The 96 junior colleges found by the study to include agriculture among their curriculums, offered 250 agricultural majors comprised of 110 terminal, 61 transfer, and 79 dual terminal-transfer courses. The General Agriculture major ranked substantially ahead of all other majors, with 43 per cent of the total 250 offerings falling within this classification. Thirty-nine per cent of these were specifically General Agriculture and five per cent, Agricultural Education. Second in point of frequency was the Animal Science Group, with 20 per cent of the total offerings, comprised of Animal Husbandry, with 6 per cent; Poultry Husbandry, with 5.6; and Dairy Husbandry, 3.2 per cent. Ornamental Horticulture ranked third, with 9.6 per cent being found under this classification. Ranking fourth was the Crops group, with 6 per cent; 2.4 per cent each of Agronomy and Truck Crops and 1.2 per cent of General Crops. The Agricultural Economics, Business, and Merchandising Group ranked fifth, with 5.6 per cent. Sixth in order was Fruit Production, with 5.2 per cent of the total. Only 3.6 per cent of the majors fell in Agricultural Engineering and Mechanics, and 2.4 per cent in the Conservation, Forestry, and Range Management Groups.

Agricultural Courses

So lengthy is the list of agricultural courses offered by the Nation's junior colleges, that it seems feasible to mention only those offered most frequently (in table form), and a few of those which appear to be unique in function or method of organization. For the purposes of comparison, all quarter units were converted to semester units. Such a table should be useful as a criterion, among other uses, for helping a junior college select the courses which can be offered in a limited curriculum. At least, it indicates which agricultural courses are actually receiving the greater attention by these institutions. It should be kept in mind, however, that a numerical rating alone might lead to error in determining which courses should be taught and which neglected. For example, although the "Feeds and Feeding" course might be one of the most important courses in the United States from the standpoint of the number of curriculums offered, the course might be completely out of place in a large city iunior college, such as City College of San Francisco (California), which stresses Ornamental Horticulture, and where few, if any, placement opportunities in livestock production are available. Moreover, in some areas, possibly better opportunities could be found by training students in important but neglected fields, and by offering unusual courses, (Continued on Page 212)

a practice which is so successfully accomplished by the New York State Agricultural and Technical Institutes, particularly the Long Island Institute.

Space limitations prevent our mentioning all the unique courses that were brought to attention through the survey, but a few may be noted.

Worthington Junior College (Minnesota) presented six General Agriculture courses, averaging 5 quarter units each. which were "patterned to meet individual student interests and needs and to help them plan and conduct supervised farming programs."

Henderson County Junior College (Texas) offered various terminal courses which are termed "practical agriculture." These unique devices provided 5 units of lecture and four units of laboratory and ran for 24 weeks. They were rotated in such a way that a student might enter any month without loss of part of the course. This training was exceptional in that it was specially designed to meet the needs of young men who need training to become established in farming, but who could not afford to complete a one or two-year terminal course.

The Potomac State School (West Virginia) provided special half-semester terminal-type courses, of two units each, m several areas. Most of these were paired, such as the two general poultry courses offered.

Many of the colleges, such as Modesto Junior College, offered combination courses, such as "Livestock Diseases and Equipment," in order to cover the maximum area with the minimum number of courses,

Supervised Farming Emphasized

Supervised farming classes were common in Smith-Hughes departments, Some, such as Yuba College (California) covered a wide range of enterprises. Most, however, were limited to a single enterprise, such as dairy cattle or truck crops. All but a handful of these courses called for one hour of inclass-seminar-type instruction per week, the rest of the units for the course being awarded for supervised farming work. They gave a unit for each 2-4 hours of project or farm experience work, with a limit of 2-4 units in addition to the 1 unit for seminar. Mt. San Antonio College (California) offered eleven such courses, each for a specific farming enterprise.

City College of San Francisco (California) offered many unique ornamental Horticulture courses. Its "Floriculture Workshop," for example, could be repeated up to a limit of six times (18 units). San Mateo College (California) and the New York State Agricultural and Technical Institutes also listed a generous number of ornamental horticulture courses which were as practically conceived as the one mentioned above.

The New York Agricultural and Technical Institutes, individually and collectively, offered a much greater array of related agricultural occupations majors than did any other school. They had

499 separate agricultural and related agricultural occupations courses scheduled, giving an average of 83.2 courses per school and an average of 9.4 special courses per major. These schools averaged 8.83 majors each. Most of the junior college agricultural programs specialized on one major, the "General Agricultural Curriculum." As with the Mississippi junior colleges, usually a single enterprise course was offered in each area such as a single dairy course, an animal husbandry course, a forestry course, a crops course, a poultry course, et cetera. Strictly in terms of numbers of majors and courses offered, the leading junior college agricultural curriculums in the United States were found in the New York State Agricultural and Technical Institutes; Modesto Junior College, Mt. San Antonio College, and Pierce School of Agriculture, in California; and Arlington State College and Tarleton State College in Texas, The New York and Texas schools were state or regional schools. In most instances, local or district junior colleges could not be expected to provide such extensive offerings. The type of instruction given for each curriculum would have much to do with the quality of each program. Such evaluation was beyond the capacity of this study. Therefore, no attempt is made to rate or rank the curriculums.

The Alternating Two-Year Basis

How to present an adequate pattern of agricultural courses with a decidedly limited staff and enrollment poses as one of the main problems of the junior colleges. Most of the schools in the survey simply restricted their offerings accordingly. Possibly a superior presentation of each course partially compensated for the low numbers of courses.

One system may be termed the "basic course and specialized laboratory method," where-by two-year courses in "Basic Plant Production" cover the entire area of the field, including soils, fertilizers, irrigation, soil conservation, cultivation, et cetera. Speciality plant enterprises, such as Deciduous Fruits or Field Crops are covered in laboratories which meet, usually once a week, and consider that subject exclusively. Some laboratory periods may be spent entirely or partially in lecture or class discussion. Animal Science subjects are covered in exactly the same way,

The disadvantages of this device are

THEME FOR APRIL

Administering the Program of Vocational _ Agriculture

apparent, such as the failure of the basic courses to fit all majors, its lack of flexibility, laboratory time limitations, and the difficulties experienced in the transfer of these courses to four-year colleges. However, it prevents duplication of the same material in different courses and does allow one or two instructors to present a wide and extensive curriculum. If the basic courses were presented on an "alternating two-year basis" an even wider scope could be

Probably the best method of attaining the goal, however, is with the "Alternating Two-Year Basis." This is a very simple process whereby all excepting key prerequisite agricultural courses are offered but once every two years. For example, it would seem of little difference if the student took "Sheep Production" his Freshman year and "Beef Cattle Production" his sophomore, than if the sequence were reversed. On the other hand, it might be decided that "Feeds and Feeding" was a prerequisite to all livestock and dairy courses, therefore should be given the first semester of each year.

The advantages of this system seem to be obvious. In the first place, it allows each man to teach the maximum number of subjects. Secondly, it enables an under-staffed agricultural department to present approximately 75 per cent to 85 per cent more agricultural courses than would otherwise be possible. The advantages of the "alternating Two-Year Basis" appears to outweigh the disadvantages, where the system is needed (low enrollment necessitating limited teaching staff). However, it must be admitted, that mismanagement or necessity might result in some basic, prerequisite subjects being presented but every other year, when they should be completed by all freshmen. It is also true that the teacher must prepare to teach from 50 per cent to twice as many courses. This makes for a heavier teaching load, and may result in the teachers being less adequately informed in the subject matter areas they present,

Although this arrangement works very nicely in such departments as that of Chaffey College, California, it is probably safe to say that it should not be employed (at least not to the maximum) excepting where it is definitely needed. On the other hand, where it seems desirable to institute the plan, which may well be the case in the majority of the junior colleges covered in the survey, intelligent planning and implementation should attain the desired ends (the expanded curriculum) smoothly and effec-

The wheel of - -

(Continued from Page 200)

just about as far toward the objectives of vocational agriculture, and FFA.

The illustrated lecture held the attention of both parents and students. I believe there has been greater interest among the Agriculture I boys and their parents in the supervised farming program this year.

Farming Programs of Kansas **Vo-Ag Students**

JAMES D. DOBKINS, Vo-Ag Instructor, Eskridge, Kansas



James D. Dobkins

THE purpose of L this study was to determine what constituted an average size farming program for those students of vocational agriculture in Kansas in the tenth, eleventh and twelfth grades. Five hundred and eighty-two vocational agriculture students represent-

ing 31 vocational agriculture departments were selected by the random sampling method.

Information requested from vocational agriculture teachers, concerning the students farming programs, was obtained from the students' completed farming program records for the year 1952. The survey blank requested the following information: Student's name, high school, town or farm boy, years in school, number of cattle, number of hogs, number of sheep, number of poultry, number of acres of crops, kind and acres of hay crops, kind and acres of pasture and total crop acres.

The Findings

The results of this study show that of the 582 students studied, 21.2 per cent of the vocational agriculture students enrolled in the tenth, eleventh and twelfth grades of the selected secondary schools of Kansas were classified as town boys, and 78.8 per cent of the students were classified as farm boys. The determination of the status as to whether a boy was classified as a town or farm boy was made by the instructors in each of the schools selected.

Some of the main findings concerning the size and scope of the farming program of the vocational agriculture students carrying the projects in their farming programs were as follows:

There was an increase in the number of head of cattle from 3.5 head in the tenth grade to 8.3 head in the twelfth grade.

The number of hogs increased from 8.5 head in the tenth grade to 23.2 head in the twelfth.

The number of sheep declined from 22.9 head in the tenth grade to 16.2 head in the twelfth.

The number of poultry increased from 57.3 head in the tenth grade to 145.7 head in the eleventh grade; however, there was a decrease in the twelfth year to 100.5 head.

The number of acres of crops increased steadily from 18.2 acres in the tenth grade to 33.6 acres in the twelfth grade.

This study indicated in general an increase in the average size and scope of individual projects in farming programs from the time the student began his supervised practice until completion of his work in the all-day classes.

Changes in the magazine staff



Dr. A. P. Davidson

son, head of the division of Agricultural Education, Kansas State College, brings to a conclusion with this issue the longest period of tenure on the staff of the Magazine to which any staff member, present or past, can lay claim. The October, 1930,

issue of Volume III carries in the list of Special Editors the name of A. P. Davidson, Book Reviews, thus starting an unbroken listing of that item through the years up to and including the February issue, 1954.

During this period Dr. Davidson, by his own estimate, has reviewed about 250 books of potential value to workers in vocational agriculture and their students. He has about thirty-five shelves filled with these books in his office, a collection which would be the envy of any of

Dr. Davidson has spent over thirty vears in the Agricultural Education field, starting as a teacher in the Nebraska School of Agriculture, a secondary school at Curtis, Nebraska. He is continuing his duties in teacher training and head of that division at Kansas State College. All of us owe a debt of gratitude to Dr. Davidson for his long and valuable service as Book Review Editor.



Alfred H. Krebs

A LFRED H. Krebs, Teacher Education, University of Illinois, has been chosen to take over the responsibilities of A. P. Davidson as Book Review Editor for the Magazine.

Mr. Krebs was reared on a farm in New York State and was graduated from Cornell Uni-

versity in 1941. He taught vocational agriculture in New York State for three years prior to entering the armed forces.

DR. A. P. David- Following the period in the service, he was employed as a training officer by the Veterans Administration for a year. He then returned to Cornell University to enter graduate school, receiving his M.S. and Ph.D. degrees from that institution in 1948 and 1950 respectively. He has been on the Agricultural Education staff at the University of Illinois since September, 1950, giving special attention to the guidance and counseling phases of the program.



Robert A. Wall

 $R_{\mbox{\scriptsize Vo-Ag Instruc-}}^{\mbox{\scriptsize obert A. Wall,}}$ tor at Luray, Virginia, was elected President of the National Vocational Agricultural Teachers' Association for the coming year at the recent AVA Convention in Chicago. By virtue of his election he becomes a member of the

Editing-Managing Board of the Magazine replacing Maxwell Lampo of Neosho, Missouri, past NVATA president. Mr. Wall has served NVATA for the past three years as vice-president of Region VI. He has served as Chairman of the Insignia and Visual Aids Committees.

Bob graduated from Virginia Polytechnical Institute at Blacksburg in 1929. He also received his Master's degree from V.P.I. He is a native of Blacksburg and now has the managerial responsibility of his home farm.

Before going to Luray, fourteen years ago, he taught at Stephens City. His FFA Chapters in both schools have won national recognition. Bob holds the American Farmer degree.

Through the years, Mr. Wall has served his state Vocational Ag. Teachers' Association as President and Treasurer and as Area Supervisor in the Institutional-on-Farm Training Pro-

Locally, he has been President of the Rotary Club and the Frederick County Teachers' Association. He is a member of the Springfield Ruritan Club, and the Board of Stewards of the Luray Methodist Church.

Analyzing projects - -

(Continued from Page 199)

litter enterprise is borne out by the analysis. Five boys employed 14 success factors and showed a net profit of \$3.18 per 100 pounds of gain. Twelve boys practicing 12 and 13 success factors had a net profit of \$0.89 per 100 pounds of gain. The net profit of five boys practicing 11 or less success factors was \$0.25 per 100 pounds of gain. (Figures are on a one sow per boy comparison hasis.)

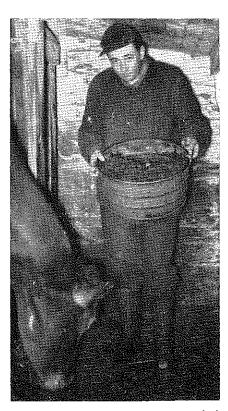
Ration rating has a marked effect upon the net profit or loss per 100

pounds of gain. The five excellent rations showed a net profit of \$3.39 per 100 pounds of gain. With the nine very good rations, the net profit was \$1.38 per 100 pounds of gain. In the case of the four good rations, the net profit was \$1.29 per 100 pounds of gain. Three boys feeding rations which rated as fair had a net loss of \$1.39 per 100 pounds of gain. The one very poor ration showed a net loss of \$5.04 per 100 pounds of gain.

A study as to the effect that pasture rating had on net profit revealed these facts: Eight boys with good pasture (Continued on Page 214)

(Continuedf rom Page 201)

great because the narrow alley meant no feed cart could be used and a "dead" end meant retracing steps for each load. The equipment consisted of carrying silage (and grain) in bushels, adding to the time.



Among the needs for improvement was lack of head-room in the feeding alley. Plans made and carried out were a part of this pupil's supervised farming program.

Tentative plans were drawn up for an improved barn eliminating the prior inefficiencies. (Usually the improvements consist of remodeling and rearranging the old barn, but because of an expanded farm business, a new barn was built.) Technical assistance on construction was obtained from the district agricultural engineer.

Picture 2 shows some of the labor saving improvements that corrected the inefficiencies in the original barn. The high ceiling eliminates stooping; wide feed alleys allow use of silage or grain carts; and alleys on each end of the barn allow for feeding around the barn.

Picture 3 contrasts the old and new barn. Note the large door permitting a manure spreader to be backed into the barn. Gutters were built to proper size to allow later installation of a gutter cleaner when capital is available. The milk house is located in the barn making it more accessible in inclement weather.

Other improvements made but not illustrated in the pictures include: overhead grain storage, large silage room to fill cart directly from silo and numerous chutes to eliminate carrying hay.

Although this illustration is from a dairy farm, the same fundamental procedures can be related to work problems on the dairy, poultry, or crop farm.

Frequency and pattern - -

(Continued from Page 203)

taining the objectives of farm teaching visits?

(4) Is there seasonal variation in the frequency and pattern of my farm teaching visits? Should this variation exist?

Some Tentative Conclusions

The question may now be raised as to whether all of the objectives mentioned as criteria can be reached by the frequency of teaching visits now being made per student per year and by the various patterns followed in making such teaching visits. A brief review of the four questions listed in the previous section of this article, as applied to the teaching-visit habits of the twenty-nine teachers studied, may help us draw some tentative conclusions. The following comments are a resume of the discussions held with some of the twentynine teachers. (1) Students having little oppor-

tunity for reaching the objectives of

proficiency in farming and establishment in farming tend to be visited less frequently than those students who have greater opportunity for such achievement. The teachers of vocational agriculture indicated that they like to work with interested, cooperative students and parents because this gives them (the teachers) a feeling of greater personal achievement. This viewpoint is an illustration of a well-known characteristic of the human personality, namely, that each of us strives for personal recognition of our "worth." This characteristic, however, admittedly leads us at times to do what we, as teachers in a democracy, should probably not be doing-spending our time and efforts with a few students or limiting our activities to the "select" of the community. Some teachers have mentioned that they have had to discipline themselves toward giving their services and their instruction without bias to all of their students. This entire question regarding who should be visited most frequently needs further study at the local community level. What do you believe is the proper course to take in our democratic public school system?

(2) There seems to be a relationship between the pattern of farm visits and the nature and extent of the achievement made by the students in their supervised farming programs. Of course, there are exceptions to this generalization and more time should be devoted to a further study of this aspect of the total instructional program in vocational agriculture. The present evidence, largely assembled by personal observation and interview, tends to indicate that there is a very strong relationship between the frequency of farm teaching visits, the patterning of the farm visitation program and the observable results shown by the development of broad supervised farming programs having within them the opportunities for the development of the fullest degree of proficiency in farming,

(3) The pattern of teaching visits which seems to most nearly meet the originally stated objectives is a pattern of regular visitation with the purposes of each visit agreed upon by the student and the teacher. A pattern based upon such foundational agreement usually shows characteristic regularity of farm teaching visits with additional visits arranged to serve the special needs identified in each student's supervised farming program. In such a pattern, each student is visited in accordance with his specific instructional needs.

(4) There are certain seasonal variations in farm teaching visits to be expected. More visits are made, on the average, during the summer (outof-school) months than during the fall, winter and spring months. The teachers who were interviewed indicated that when the student is in class regularly, where he can discuss certain kinds of problems regarding his. supervised farm practice with the teacher and his classmates, there may be a need for fewer additional farm teaching visits during the months when school is in session. There is also often less time for the teacher to make the desired number of visits during the school year because of the teaching work-load and the extracurricular activity responsibilities which fill the teacher's day.

Summary

We will grow stronger professionally as we appraise our own programs and activities in a critical manner and select improved techniques for our instructional programs. With the afore-mentioned questions and observations in mind, we who are workers in the field of vocational agricultural education, should reevaluate our activities as teachers, supervisors and teacher-trainers in order that more effective farm teaching visit techniques may be developed. It is in the area of human relations and in the informal teaching methods of the farm teaching visit that "learning by doing" will take place and we all recognize this concept as a necessary part of the "complete" learning process. Should not we all look toward an improvement of our total program of instruction by the reevaluation and improvement of this major teaching method, the farm teaching visit.

Analyzing projects - -

(Continued from Page 213)

had a net profit of \$2.40 per 100 pounds of gain. Eight boys with fair pasture showed a net profit of \$0.78 per 100 pounds of gain; and, the six boys with poor pasture showed an average net profit of \$0.02 per 100 pounds of gain.

A comparison of data, involving boys with more than one litter will be found in the Table.

Boys numbered one and three did not have the success with their sow and litter enterprises that boys numbered seven and thirteen had with their enterprises. The data obtained, when used in (Continued on Page 215)

BOOK REVIEW

SOILS AND FERTILIZERS, 4th edition, by Firman E. Bear, pp. 420, illustrated, published by John Wiley & Sons, list price \$6.00.

The book has been completely rewritten for the fourth edition, 66 new illustrations have been added, and a concise presentation is made of recent advances in soil science. The author emphasizes the importance of soil in the production of sufficient high-quality food to meet the demand of a rapidly increasing population. Attention is given to the many newly developed soil chemicals, and new chapters are devoted to the resources of such important elements. The text comprises twenty-seven chapters, is written on the approximate level of first year college, is interesting and easily read. Soils and Fertilizers should play an important role in teaching agriculture on both the college and secondary school levels. Veterans-onfarm students as well as laymen will find this text of value.

Teaching Device Available OSCAR R. LeBEAU, Farm Credit Administration, Washington, D. C.

A GRICULTURAL teachers who are looking for new ways to vitalize their teaching will be interested in the recently published flannel board talk entitled "The American Private Enterprise System." This talk is designed to showhow all types of businesses help to provide needed services for the community. It serves also to show the helpful role which farmer cooperatives perform in the American economy.

Beautifully colored flannel board cutouts have been prepared to enable the teacher to give a step-by-step presentation. These colored cut-outs can be procured at cost (\$10.00 per set) by writing to the American Institute of Cooperation, 744 Jackson Place, N. W., Washington 6, D. C.

The lecture notes can be procured gratus by writing to the Farmer Cooperative Service, U. S. Department of Agriculture, Washington 25, D. C., and asking for FCA Circular E-35-E, Revised.

Don't miss trying this helpful instruction aid. Those who have used it are enthusiastic about it.

The Cover Picture

Experience gained under actual farm conditions is the essential element of a supervised farming program. Pictured on the cover page is one means by which such learning may be facilitated. Here, Donald Kabler, Vo-Ag Instructor at Corvallis, Oregon, is showing four of his pupils how to predict the yield of wheat on the Chapter-operated farm near Corvallis. The wheat yielded just over one ton to the acre. In addition to learning to produce wheat the pupils in the classes at Corvallis have been consistent winners in crop competitions at the Oregon State Fair. Kabler, a former president of the Oregon Vocational Agricultural Teachers' Association, holds a Master's Degree in Farm Crops from Oregon State College.

... Tips That Work ...

Our Chapter Bought Machinery

To keep an FFA Chapter on its toes and keep it moving toward the attainment of the aims and purposes of the Future Farmers, a challenging program of work cannot be overemphasized. For two or three years past our Chapter had been toying with the idea of getting more machinery which the members could use on their farms under a customized basis. The officers and the advisory council were in favor of the venture and they did an excellent job of selling the project to the members and to the community.

We realized that the machinery must be of a specialized type, not common on all of the farms of the FFA members. The Chapter decided on the following: a 2-plow tractor, a baler and a side delivery rake. A Ford tractor was purchased because of its versatility, an International 5-T twine baler, and a Dearborn side delivery rake. The tractor cost \$1200, the baler \$1400, and the side delivery rake \$450. These prices were exceptionally low due to large discounts from local implement dealers.

The next problem was finances. The Chapter had about \$850 in cash, and the school board agreed to back a loan at the bank and also gave permission to borrow \$500 from the high school activity fund. The bank loan was for \$1650, signed by the President and the Secretary of the Chapter and the President of the Board of Trustees. The note was at 6% interest, payable in 18 months. The Chapter had the full cooperation of the Board of Trustees and Mr. D. W. Githens, superintendent, throughout the program.

A machinery committee was appointed under the co-chairmanship of the Chapter secretary and president. This committee decided that, due to the technical type of the machinery, only one or two members should actually operate it but all members should donate one day of labor. The committee also drew up a complete set of rules regulating the operation and use of the machinery. During the first summer the Chapter baled 13,500 bales of hay and 1850 bales of straw for a total income of \$1750. \$1300 was paid to the bank and \$300 paid to the student activity fund.

To handle the question of liability, the Chapter, with the assistance of the advisory council and the county attorney, drew up Articles of Incorporation for the Chapter, and the Board of Trustees agreed to pay the premium on a liability insurance policy. In return for this the



Chapter baler and tractor at work.

Chapter agreed to clean the sidewalks around the high school each winter. We also took out a health and accident policy on the operator of the machinery.

The machinery committee next decided to trade the International baler for a New Holland baler in order that the members could become familiar with more types of machines. The exchange price amounted to an additional \$250.

During the second summer the Chapter custom-baled about 6000 bales of hay and 750 bales of straw with an income of approximately \$800. It was decided that in order to pay off the loans in 1953 the Chapter would contract to bale straw on the farm of Frank Martin, one of the Chapter members, 1800 bales of straw were baled, all of which was donated to the Chapter except for 150 bales to the Martins. The straw was then sold to the members at 25c per bale and at 35c per bale to other persons. 500 bales were sold to the Central Montana Fair Grounds and 300 to the Central Montana Stockyards in addition to many other smaller sales.

The haying season of 1954 should return a very good profit to the Chapter which may be used for other activities. One project for the future is to purchase a rock picker. I might mention here that the income from other moneyraising activities, such as concession stands, carnivals, etc., also helped to pay for this machinery.

In summarizing this activity, or series of activities, I can sincerely say that it has been a great incentive to the organization. True, at times it was a great deal of work and worry for the advisor, but the satisfaction in watching the program develop was well worth the grief.

James M. Schultz, Vo-Ag Instructor, Lewistown, Mont.

Analyzing projects - -

(Continued from Page 214)

discussions of the success factors, make ideal teaching material. Similar comparisons can be made with pupils producing single litters.

The average pig in this analysis weighed 130.7 pounds. An analysis of sow and litter enterprises is being made again during the present year. We are not satisfied with the 130.7 pounds average pig weight. For the coming year we have a set goal of 145 pounds at five months of age. We can reach this goal if three items are corrected: (1) all boys clip navels within three hours after the pigs are born to prevent infection and possible scours; (2) start creep feeding at seven days of age, using a B-Complex Vitamin Supplement containing an Antibiotic; and, (3) encourage every boy to have good pasture available to supplement well balanced rations.

Stories in pictures ...



Apprentice teacher at Edmeston, N. Y. demonstrates method of cutting Christmas trees to local FFA members. Harvesting and selling these trees is a Chapter project. (Photograph by Harold L.

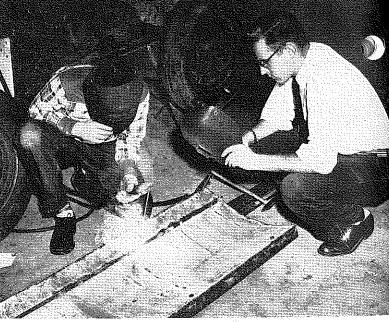




Apprentice teacher at Hamilton, N. Y. visits local feed dealer to secure information to be used in guiding boys to plan a ration for the cows on their farms as a part of their farming programs.

(Photograph by Harold L. Noakes.)

Apprentice teacher at Holland Patent, N. Y. checks on progress of Vo-Ag boy who is making a snow plow blade as a part of his farming program. (Photograph by Harold L. Noakes.)



Apprentice teacher at Sherburne, N. Y. using home-made rear-projection screen to show pre-vocational boys pictures of farm skills they would acquire through Supervised Farming Programs. Rear-projection screen made of frosted glass or frosted acetate may be used without darkening room. Screen shown is 18" by 20". Note position of projector at right of screen and mirror at left of screen against bookcase. Slide is projected against mirror which reflect picture to rear of frosted screen. Projection distance can be shorted by taping a plustive less to projector less. Public view screen. ened by taping a plus-two lens to projector lens. Pupils view screen in same manner they would a television screen. (Photograph by Harold L. Noakes.)

The A GRICULTURAL DUCATION Magazine

NUMBER 10 VOLUME 26 APRIL, 1954

Picture legend, page 232

Featuring-

Administering the Program of Vocational Agriculture