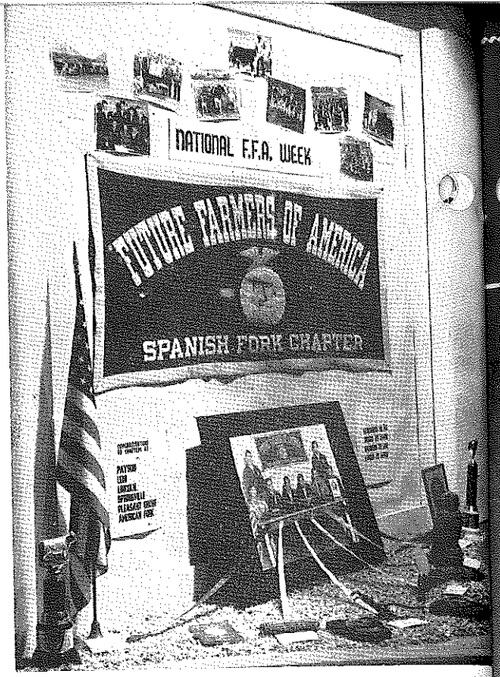
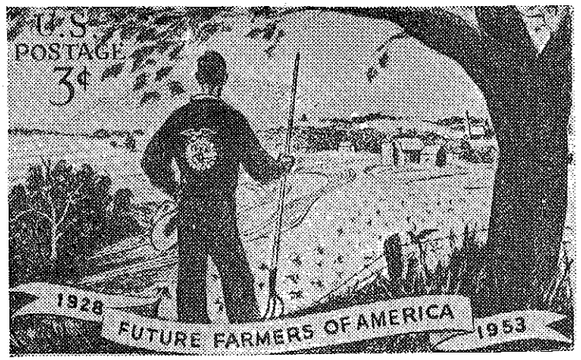
Stories in pictures

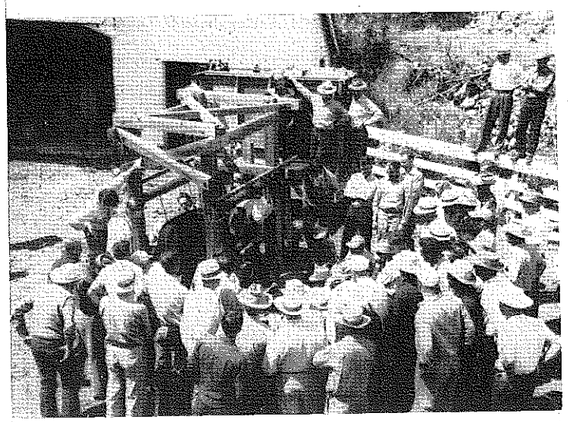
he West Virginia FFA State Association has an active Past State Officers Club. Shown bove are the past state officers who organized the club at Jackson's Mill in connection ith the annual State FFA convention in Augusts, 1947. Joe P. Bail, with gavel, was the first president of the club.



A store-window display prepared by the Spanish Fork, Utah, Chapter and placed in the county shopping center during National Future Farmer Week.
(Picture furnished by Farrell G. Olsen, Vo Ag Instructor, Spanish Fork, Utah)



The FFA 25th Anniversary Commemorative Stamp.



A part of the 200 Young Farmers participating in the 6th annual Young Farmers tour in Utah. Here they are observing a beef foot-trimming demonstration at the Winterton Ranch, Kamas, Utah.

Young Farmers in Utah looking over the Hereford herd on one of the stops made during the annual tour of the Young Farmers Association.

The AGRICULTURAL EDUCATION Magazine

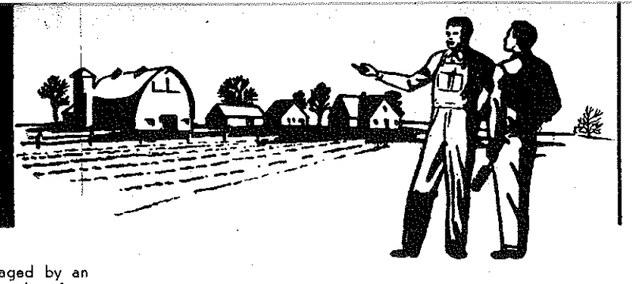
VOLUME 26 MAY, 1954 NUMBER 11

Picture Legend, page 263

Featuring—

Evaluating Programs in Vocational Agriculture

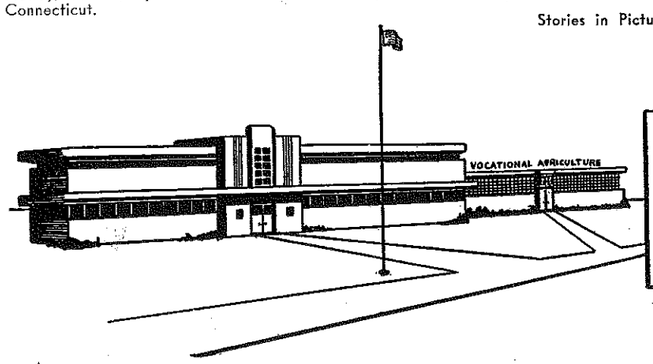
The Agricultural Education Magazine



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

THE INTERSTATE DANVILLE, ILL.

Contents



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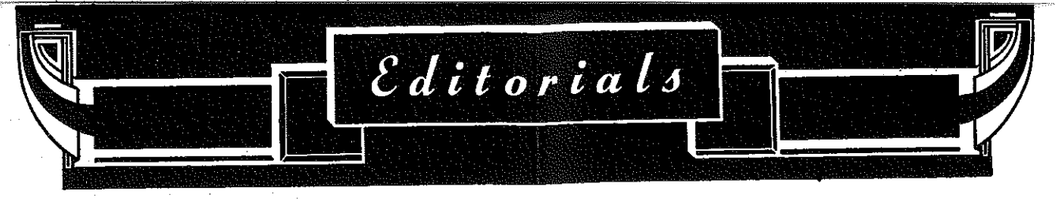

Guest Editorial

ALLAN B. KLINE, President, American Farm Bureau Federation

The accomplishments of American farmers during the last fifty years read like a fairy book. I was born on a farm in northeast Nebraska in 1895. It is hard to remember what went on in a farm home in the early nineteen hundreds, and furthermore, it is hard to believe. There has been a veritable revolution in farming and in rural living.

It is quite true that progress has been uneven in various parts of the country. There is a great deal to be done in some places, and there is no limit to the potential in any place.

This progress has been in every field — farm production, farm marketing, and farm living. It often seems that production has made the greatest progress. However, we cannot, as farmers, overlook the changes which have taken place in farm living that resulted from the use of power and power machinery on the farm, around the farmstead, and in the home. Good roads and improved transportation have played a major part as well.

The particular point I wish to stress here is that these fifty years of progress would have been impossible without the achievements of our educational system. Progress in the science of agriculture on the campuses and in the experiment stations of our institutions of higher education would not have done the job even with the excellent extension service and vocational training in high schools. The progress of the past fifty years would have been impossible except for improved general education. It was here that the farmer and the farm community improved their ability to use information as it was developed.

To this educational pattern vocational training and all the things which are listed under the heading of vocational education have played an indispensable part. I have, personally, seen communities where both farming practices and farm living were profoundly improved by the work of a single vocational education department in one high school. On the basis of the record, this work deserves the support of all of us.

It has always seemed to me that teachers in vocational agriculture, with whatever institution they may be connected, have an extraordinary opportunity to affect the lives of students, which is over and above the job of teaching them the science and practice of farming. In the nature of the case, vocational teachers get very close to their students. This gives the teacher a real opportunity.

The tangible accomplishments which the student can make, under the guidance of vocational training, give him confidence in other things which the teacher may say or do. With this in mind, there is a considerable *plus* available to the teacher and to the institution with which he is connected if he uses this confidence to encourage these young farmers to improve their understanding and to form habits which will continue their education as long as they live. I have great enthusiasm for the future of teachers of vocational agriculture and for the agricultural education programs, of which they are the key personalities. □

Research in agricultural education— a critique

GORDON SWANSON and MILO PETERSON, Teacher Education, University of Minnesota

Almost four decades have passed since the first recorded studies in Agricultural Education. Since that time about eighteen-hundred studies have been reported and summarized. The first summaries were published in 1935, in Bulletin 180 by the U. S. Office of Education, a practice that has continued until the present time.

In retrospect it is interesting to examine the summary of studies published in 1935. It includes an introductory statement by R. M. Stewart, then chairman of the research committee, agricultural section of the American Vocational Association. It also contained an evaluation section authored by F. W. Lathrop, then the research specialist in the U. S. Office of Education. Dr. Lathrop evaluated two decades of research in Agricultural Education. Curiously enough, no similar evaluation has been given in the subsequent summaries.

The first evaluation of the summary of studies was a critical one. It established a set of criteria to guide future studies and it offered a series of criticisms of those already completed. The criteria established by Dr. Lathrop were completeness, accuracy, elimination of bias, and observance of the law of the single variable. He urged increased size of samples, more adequate representation in sampling, increased accuracy of both the data and its treatment, and more clarification of assumptions. He also urged caution in the use of opinion and its selection.

In his criticisms of completed studies, Dr. Lathrop charged that much of the work was being done by graduate students. He also said that the research lacked continuity and gave little evidence of a scientific attitude. He added that it lacked applicability of findings and that there was little evidence that the possibilities of statistical treatment had been generally realized in agricultural education.

After nearly twenty years these criticisms are unfortunately so apt that little is left to be said. The criteria when written were completely modern and need changing only in the light of advances in methodology. The number of studies has quintupled in the period that has intervened. In quantity our progress has been distinct. Qualitatively we need careful re-examination.

A Look at 1954

In examining the more recent "Summaries of Studies" one finds that the earlier criticisms are thoroughly appropriate. In the latest summary published in 1954, there are 156 studies of which 85 percent have been completed as part of a degree requirement. In the summaries covering the years 1948 through 1952, 503 studies were completed and summarized and nearly 90 percent of them are "degree" studies. Such studies are necessarily limited in scope and duration. It is only at the risk of impairing the individual

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Let's take stock of our situation

Through the use of standards in evaluation

M. S. ROGERS, Teacher Education, East Texas State Teachers College

M. S. Rogers

DOES the average vocational agriculture teacher consider objectives and evaluation as being inseparable? Both are likely to suffer when they are treated independently of one another. Too often we think of objectives in terms of strictly technical agriculture.

Agricultural education is a branch of *education*. It is not a branch of agriculture, even though it must lean upon agricultural subject-matter to accomplish its purpose. Education has to do with inducing growth and change in people. That is the one and only purpose for which our schools exist.

The teacher of vocational agriculture faces a difficult task since education in and for a democratic society calls for the expenditure of so much money, affects the well-being of so many pupils, challenges the interests and support of so many parents and other patrons, requires the services of so many individuals, and influences the welfare of democracy itself.

An adequate statement of guiding principles for vocational agriculture should recognize:

1. Consideration of philosophy and objectives.
2. Pupil population and school community.
3. Educational program, including
   a. Curriculum and course of study
   b. Pupil activities
   c. Instructional materials
   d. Vocational guidance
   e. Instruction
   f. Outcomes
4. Department facilities
5. Department staff
6. Administration

It is essential for each department to have a carefully formulated agricultural-educational philosophy. The stated philosophy should be associated with and be made specific in a statement of objectives. Without such a statement of objectives growing out of a sane educational philosophy, a department of vocational agriculture leads an aimless life.

The local community, with other help, supports the department of vocational agriculture for the benefit of the boys and adult farmers of the community which the department serves. The vocational agriculture teacher should know the distinctive characteristics and needs of the people of the school community, particularly those of the boys in his classes.

Some of these may be listed as the following:

1. The types of people.
2. Their types of farming and interests.
3. Their tendencies and prejudices.
4. Their abilities.
5. Their racial characteristics.
6. Their hopes and prospects regarding the future.
7. Their customs and habits.

The similarities and differences of groups within any community are different from those of other communities.

The educational program is the most important and difficult phase of the secondary school to evaluate. It must be emphasized that education is concerned with more than the accumulation of knowledge, the development of skills, and the improvement of understanding. The evaluation of an agricultural educational program should be made in terms of at least the six principal elements mentioned above — the curriculum and course of study, pupil activities, instructional materials, vocational guidance, instruction, and outcomes. These are interrelated parts of a whole and should not be evaluated independently of one another.

The curriculum may be defined as all the experiences which pupils have while under the direction of the vocational agriculture department; thus defined it includes both classroom and extra-classroom activities.* All such activities should therefore promote the needs and welfare of the individual and of society.

Courses of study may be defined as that part of the curriculum which is organized for classroom use in connection with the boys' supervised farming programs. They suggest content, procedures, aids and materials for the use and guidance of teachers and pupils. Thus considered they contain only part of the individual pupil's curriculum. Because change is universal, constant adaptation and development of the curriculum is necessary.

There can be no rigid dividing line, educationally, between the usual classroom activities and those activities sometimes called "extra-curricular activities" which commonly permit more freedom and are more largely initiated and directed by the pupils themselves.

There is need for pupil participation and expression in experiences which are more nearly like out-of-school and daily life experiences than are the usual, in many cases, classroom procedures. In all activities the development of leadership ability in pupils should be one objective. Opportunities for exercising leadership should therefore be abundantly provided.

A variety of *appropriate* agricultural reference books, U. S. government and state agricultural publications, periodicals, catalogs and pamphlets should be found in the vocational agriculture library. The vocational agriculture library should be the center of the educational life of the department, not merely a collection of books. It should provide the reading and reference necessary to make the educational program effective. Its books and other resources should therefore be chosen in light of the specific aims and purposes of the vocational agriculture department.

The library and its facilities not only should be readily and easily accessible but also should be so attractively equipped that aesthetic tastes will be developed. Other instructional materials should:

1. Emphasize farm problems of the community.
2. Contain information and suggestions for the conduct of supervised farming programs.
3. Be organized effectively to include the use of visual aids at appropriate times.

A number of recent factors have emphasized the need for the guidance of young people who must make their way in this complex civilization. A few of these may be listed as:

1. The rapid growth of secondary school enrollment.
2. The change in the character of the school population.
3. The apparent breaking down of some of the social agencies dealing with youth.
4. The rapid changes in the business and industrial world resulting in longer attendance.
5. The attendant expansion of our educational offerings.

Every teacher should realize that he has some responsibility for guidance and that he can do much to meet some pupil needs.

Philosophy, staff, pupils, curriculum and course of study, pupil activities, instructional materials, vocational guidance — all these are highly important and all are essential in a program of organized education if we are to serve the needs of youth and of society as a whole.

However, to make these elements and factors really effective and to economize time, energy, and money, and to make them productive of desirable results, an organized program of teaching and learning is essential. In this program all elements and factors named above should cooperate, particularly the teacher and the pupils, for without learning there is no teaching and without teaching much learning is difficult and wasteful.

In this cooperative teaching and learning activity here are some of the things that we as vocational agriculture teachers should consider:

(Continued on Page 250)

*Others may define a curriculum differently. (Ed.)

Every teacher can profit from better understanding of the meaning and practice of

Evaluating the effectiveness of instruction

ROY TABB, Teacher Education, University of Kentucky

Roy Tabb

EVALUATION of the results of instruction is necessary to good teaching. Teaching is guiding or directing the learning process. If the teacher is to proceed intelligently, he must know how well he is succeeding. He needs to know wherein his teaching efforts are being fruitful and wherein they are not.

Teaching is an intentional process. A teacher sets out to get certain learnings in his students. He must be able to know what progress he is making. To what extent or degree are the students acquiring the intended learnings? Wherein are they and I succeeding? Wherein not succeeding? How far along are we in attaining our objectives? To these questions the teacher must have an answer if he is to give good instruction.

Learning is individual. Each person must learn for himself. In order for the teacher to know what learning has resulted from his instruction, he must find out the extent to which *each student* has acquired the intended learnings.

What Evaluation Means

Evaluate means to estimate the value, amount, extent, or degree of something. Evaluating instruction is estimating the value of the instruction — the results of it. It is estimating or judging the amount or extent of the learnings acquired by the students who are receiving the instruction.

How Instruction May Be Evaluated

In order to evaluate the effectiveness of instruction, one must appraise the extent or degree that each student has acquired the intended learnings. It is desirable that the teacher have a standard of achievement to use in judging the extent or degree to which the student has learned. The ideal would be for each student to acquire all the intended learnings to the proposed degree.

The teacher must have a well-conceived goal of attainment for each learning he proposes to secure, and be able to judge the progress of each student toward that goal. As students vary widely in their ability to learn, a good teacher will have different attainment goals for different students. In good evaluation of the instruction in a class, the teacher appraises the learning of each student as compared to the goal set for that student.

Evaluation Should Be Continuous

In order for evaluation to contribute most to the effectiveness of instruction, it must be carried on continuously along with the instruction. (Strictly speaking, instruction is seldom possible in the absence of evaluation.) If the teacher can judge how well the students are learning during the instruction, he can alter his instruction if necessary so that the students will move along at an optimum pace. If the teacher knows that most of the students are making satisfactory progress, he can fashion his instruction so as to move ahead. If a sizable number of students are not learning to the degree expected of them, the teacher can change his instructional process to enable these students to learn successfully.

Evaluation at the end of a unit, six-week period, or semester cannot be of aid in improving instruction while it is in progress and may provide only lim-

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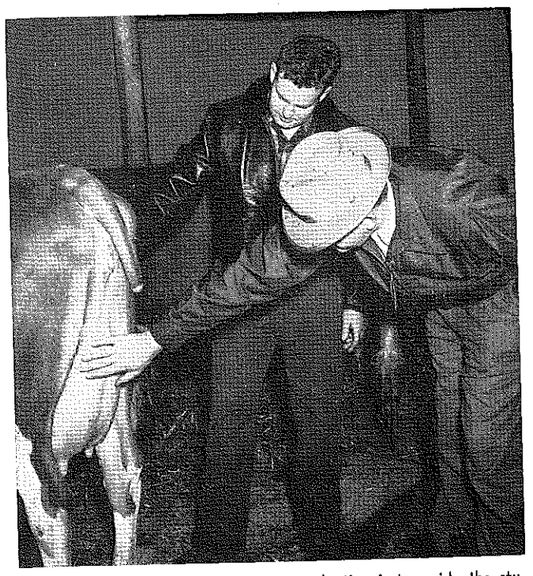
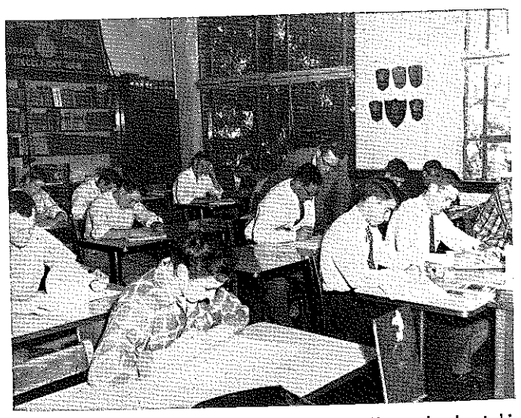
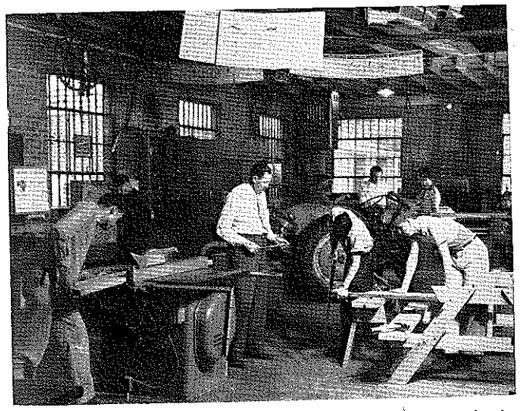


A primary function of the teacher's evaluation is to guide the student in evaluating his own achievements. This can occur most effectively on the farm.



What a student does during instruction reveals much about his learning. One not only learns through the activities he engages in; these activities also reveal his learning.



Much evidence of learning can be observed during farm mechanics instruction. A skillful teacher can gather much of the evidence he needs by carefully observing what the student does.

ited opportunity to make corrections in the instruction. It is like evaluating the workmanship of a house after the house is built in order to correct faulty work. Faulty work should be corrected when it is being done rather than waiting until the house is completed. Faulty instruction should be corrected when it is being given rather than after the instruction is completed.

A good teacher must regard his instruction as faulty, inadequate, or imperfect if each student does not progress adequately toward a learning goal that is valid for the student. A teacher can improve his instruction only when he is able to detect shortcomings in it.

Student's Self Evaluation

Usually one's own knowledge of the results is necessary to his learning; one must know wherein he has achieved and wherein he has has not achieved. Knowledge of results provides the awareness of success or failure. Practice is usually futile unless one knows the results of his efforts.

A student evaluates his achievement in terms of the goals he has. He compares his achievement with his goals. It is the responsibility of the teacher to help the student have clear and valid goals. Likewise, the teacher should help the student size up his achievements of his goals.

A primary function of the teacher's evaluation of instruction is to guide the students in evaluating their achievement. A person learns through his own activities; his evaluation of the results of these activities affects his future activities. Good teaching includes getting the students to evaluate their own learning.

Examinations for Grades and for Evaluation

Examinations or tests given in order to assign grades or marks may stand in the way of good evaluation of instruction. The examinations may not provide the teacher with the knowledge of the results of instruction which he should desire. Most school tests given for the purpose of recording grades attempt to get at the possession of information only. Examinations or tests which are used *against* a student may cause him to cover up or conceal many of his learnings. He may say what he *thinks* will make the most favorable impression on the teacher rather than reveal what he *believes* or feels. Furthermore, the making of a certain grade may become the student's goal rather than acquiring a learning for some more valid purpose.

Most teachers are not skilled in designing tests which reveal weaknesses or strengths in learning. Few teachers can design a test that gets at the more significant aspects of learnings such as the beliefs or attitudes the student holds or his ability to perform in lifelike situations. At best, examinations attempt to test a sample of the learnings in which instruction has been given. Most teachers do not have the ability to take a reliable or accurate sample of their instruction for testing. The test results can be no more reliable than the accuracy of the sampling.

There are better and more valid ways of evaluating the results of instruction than examinations for grades. If tests or examinations for grades must be given, they should be identified as such to avoid getting them mixed up with procedures designed to evaluate student progress.

Procedures for Evaluating Instruction

A skillful teacher must have effective and usable procedures for evaluating his instruction and student progress. Good evaluative procedures have most of the following features. The procedures should:

1. Do a reasonably accurate job of estimating the extent or degree of the achievement of each student.
2. Be simple to use.
3. Fit in naturally with the instruction.
4. Require little time of the teacher or student.
5. Be used continually during the instruction so that the instruction may take place and that it may be improved.
6. Cause the students to do self-evaluation.
7. Not hamper the giving of instruction.

Evaluating the results. The student's understanding of what the results actually were has much to do with his enthusiasm for continuing to use the practices.

Basis for Evaluative Procedure

Good procedure for evaluating the effectiveness of instruction requires having or doing these things:

1. Clearly defined learning goals or objectives so that both the teacher and the students know what they are attempting to accomplish.
2. Knowledge of the extent or degree to which each student is acquiring the intended learnings.
3. Comparing where the student *is* with where it seems he *should be* in securing the intended learnings.

These three things are the basis for both teacher evaluation of student achievement and self-evaluation by the student. To evaluate progress, one must know where he is going, know how far along the road he now is, and what is still to be done in order to get to where he is going.

Securing Evidence of Student Attainment

If the teacher's goals or objectives are clear and definite, his biggest job in evaluation is securing adequate evidence or proof of where the student is along the road toward the learning goal. A skillful teacher can gather much of the evidence he needs to judge student progress by careful observation of what the students do (one not only learns through the activities he engages in, but in them he reveals his learning):

1. During the lesson set-up to give the initial instruction —
   a. The student's participation in the instructional activities.
   b. His apparent interest in acquiring the learning.
   c. His understanding of the information used in the lesson.
   d. His apparent acceptance of the principles or practices arrived at (the conclusion) through the lesson.
   e. His ability to make application of the practices to his own situation — see how they fit him.
2. During subsequent lessons dealing with things which involve the learning —
   a. The student's ability to see that the learning is involved.
   b. His understanding of the principles and practices.
   c. His apparent acceptance of these principles and practices.
   d. His ability to use the learning in the new situation.
3. In a life situation (a case study or application problem) involving the use of the learning —
   a. The student's ability to recognize that the principles and practices of the learning are involved.
   b. His ability to use the learning in the situation.
4. In planning his supervised farming program, which should make use of the learning —
   a. The student's ability to see where the practice fits into his farming program.
   b. His belief in the desirability of using the practice, and his enthusiasm for using it.
   c. His ability to plan to use the practice.
5. In carrying out his farming program —
   a. The student's attempt or efforts at using the practice.
   b. His ability to use the practice properly.
   c. His understanding of the effects of using the practice.
   d. His ability to evaluate what he has done and the results.

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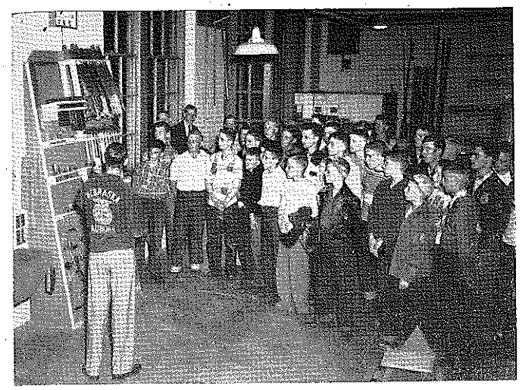
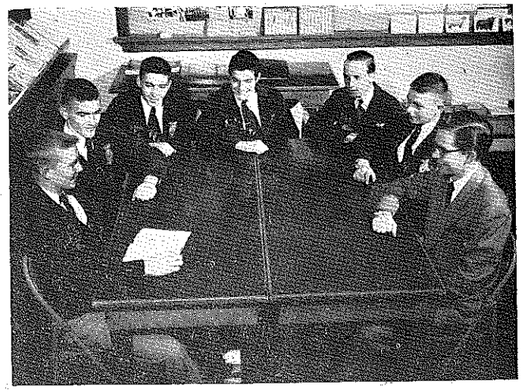


Are prospective Vo-Ag pupils in the patronage area informed of the program and encouraged to enroll?



Is the FFA Chapter in the hands of capable leaders who plan programs and exert leadership?

Improved service through evaluation

There are several parts of a Vo-Ag program to examine individually as well as collectively

DUANE M. NIELSEN, Vo-Ag Instructor, Auburn, Nebraska

THE degree of success with which a department of vocational agriculture serves the members of its community is probably more dependent upon the balance of its organization than any other single factor. This essential balance can be attained only by the placing of emphasis upon each area of vocational agriculture in direct proportion to the essential needs existing in each area and it can be maintained only by frequent, if not constant, evaluation of the department program.

Evaluation is a disturbing word in itself and when applied to a vocational agriculture program it seems to suggest so many complexities that the instructor, no matter how much he accepts the value of its results, may easily become dismayed and, consequently, not develop a truly usable system of evaluation. In reality, a systematic evaluation procedure is not complex. In fact, the simpler it can be made the more effective it will be. It is not too unlike the procedure one would follow in evaluating a dairy cow. First, from a distance, the entire animal is surveyed to determine the desirability of its general appearance. Following this overall view, sections or individual parts of the animal are inspected more closely to determine their deficiencies and desirable characteristics. Productivity and many other factors are considered until the total evaluation is completed. Similarly, evaluation of the local department program logically consists of the overall embracive view and then close-up specific inspection of each component.

Many Aids Available

There are many aids for use in evaluating dairy cattle. There are also many aids in evaluating a vocational agriculture program. Countless "score cards" are available which, when adjusted to the local situation, will provide helpful background information. When more than one person inspects a dairy cow it is less likely that areas of weakness will be overlooked and several judgments are more inclusive than one in evaluating the vocational agriculture program. The local advisory council can constantly assist in furnishing this range of opinions.

When, fortified with these assisting devices, the instructor stands back and embraces his total program he sees several areas among which he is dividing his time and effort. A time survey will help to establish the present distribution of emphasis and, when analyzed, will yield the ratio of results attained to time spent. This gives the present general appearance of the program. Following are some of the areas that the more detailed inspection should include.

Day Class Program

1. Are all of the prospective agriculture students in the patronage area informed of the program and encouraged to enroll?
2. Do the farming programs of the day class students reflect a trend toward establishment in farming?
3. Is the course content organized by the students around their needs?
4. Is the instruction designed to solve the present needs of the students — are changes in learners resulting?
5. Are the students evaluating their own work?

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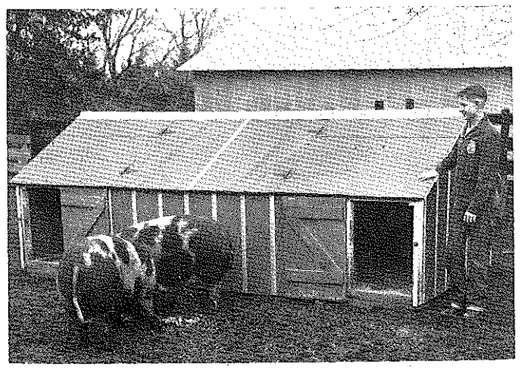
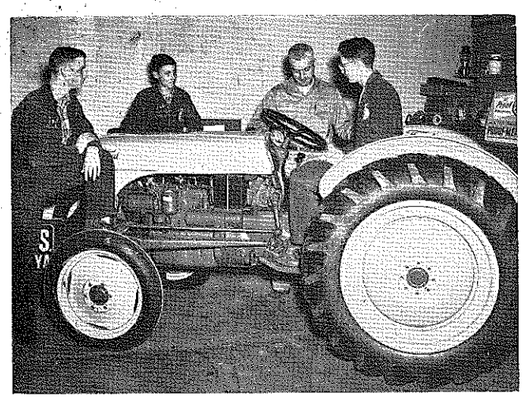


Do the farming programs of the students reflect a trend toward establishment in farming?

Are farm skills being learned and are they being included as a part of farming programs?



Does an effective public relations program exist with other agencies and other programs?

Do the members of the FFA Chapter plan and conduct their activities effectively?

6. Is a counseling program in action that guides the students to realize their capabilities and limitations?
7. Is the FFA program organized to meet the needs of the individual members, the Chapter and the community—is its scope in line with the other areas of the department program?

Out of School Program

1. Does the out of school program include both beginning and established farmers in the community?
2. Are the courses organized by the members around their needs?
3. Are farm problems solved — do the solutions show up on the farms?
4. Are leadership and recreational opportunities provided in the program?
5. Is active participation provided for all members?

School and Community Relationships

1. Is the instructor of vocational agriculture well accepted and respected as a member of the high school faculty?
2. Are the school administrators and agencies for public information in the school and community kept well informed of the objectives of the department and its progress?
3. Is there effective cooperation with and participation in the farm and civic organizations of the community?

Participation in Professional Organizations

1. Does the instructor effectively participate in the organizations of his profession?
2. Are the varied contributions of the professional organizations adapted to and utilized in the local program?

Improvement of Physical Facilities

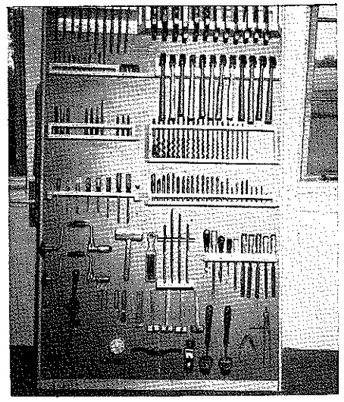
1. Is constant emphasis placed on making the department a more pleasant and efficient place in which to work?
2. Are the various groups within the department consulted and utilized in making the improvements?
3. Is maximum stress placed on practicality and safety?

Professional Improvement

1. Does a systematic plan exist for continuous upgrading of the ability of the instructor to serve his community?
2. Does the instructor place major emphasis on maintaining high personal mental and moral standards?

It is quite apparent that these areas are not all-inclusive of the many segments of a well developed vocational agriculture program and equally definite that the questions suggested would not thoroughly investigate each area. Evaluation of the department program should be complete and continuous and the results of evaluating should be effectively used so that maximum service to the community can be attained. □

Is instruction provided for young and adult farmers?



Is emphasis given to improvement of physical facilities?

Evaluating Instruction

(Continued from Page 246)

6. In keeping progress charts, summarizing his farming program, and analyzing end reports —
   a. The student's understanding of what he did.
   b. His ability to see the results from the practice.
   c. His enthusiasm for the use of the practice.
7. Apparent enthusiasm for continuing the use of the practice.

The Effectiveness of Instruction in Vocational Agriculture

"The proof of the pudding is in the eating" holds true when evaluating the effectiveness of instruction in vocational agriculture. The final proof that a student has learned a farming practice is the use he makes of it in his farming operations and how well he understands what he is doing. If he uses the practice intelligently, it can be assumed that he has learned to use the practice. If he has opportunity to use the practice but does not use it, it can be assumed that he has not learned the practice.

The effectiveness of a teacher of vocational agriculture can be evaluated in terms of the extent to which his students use the practices in which instruction is given (if instruction is given in important practices). If the students do not use any of the practices in their farming, effectiveness of the instruction is zero. If all the students use all of the practices expertly and with good understanding, effectiveness of the instruction may be evaluated as perfect.

It would seem that a skillful teacher should be able to get an accomplishment of more than 50 per cent of his students using the farming practices in which instruction is given, and using the practices fairly expertly and with reasonably good understanding. □

Our advisory council has helped us*

Assistance in evaluating the state program was obtained

WARREN G. WEILER, Supervisor, Ohio

Warren G. Weiler

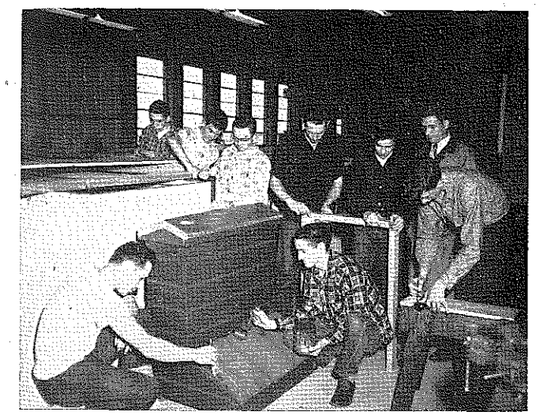
IN Part I of this discussion of the use of a State Advisory Council in Ohio, the organization and operation of the Council was reviewed. In addition, the problems and policies that have received consideration were listed. However, the very important question, "How has the Advisory Council helped?" remains to be answered. I shall attempt to do this by relating what we did about the suggestions and recommendations received.

About five years ago we asked for help in evaluating the work of the state office, in both administrative and supervisory areas. After presenting our program and procedures to the Council, we received numerous suggestions, as reviewed below, and have attempted to put many of them into operation.

1. The state office should keep school administrators adequately informed regarding the objectives of the program, as well as policies and procedures. As a result we have —
   a. Sent a minimum of two letters per year directly to administrators. These discussed problems, asked for suggestions, outlined proposed administrative changes, and gave full information regarding changes when determined.
   b. Prepared a manual or handbook entitled "The Ohio Plan of Agricultural Education" covering policies and procedures. Copies were sent to all teachers of Vocational Agriculture and administrators with departments.
   c. Held district meetings of administrators and teachers during which Vocational Agriculture problems were discussed frankly. The teachers usually invited their superintendents as their guests.
   d. Initiated a study of our Farm Mechanics Program to determine ways in which the program might be improved through pre-service and in-service training, as well as through other aids to teachers.
   e. Conferred with Industrial Arts and General High School Supervisors to determine how limited shop space in small schools can be used most effectively. As a result a joint statement of recommendations has been prepared.
   f. Suggested to teachers that superintendents be given copies of summer programs. A high per cent of teachers are following this procedure.
   g. Worked with a representative of the State Auditor's office in the preparation of a statement of understanding in regard to the proper use of vocational funds for travel. Copies of this statement were sent to all teachers and school administrators with departments of Vocational Agriculture.

2. Nearly a full day was spent by the Advisory Council and the staff in discussing the low enrollment problem. The Council gave approval to the following:
   a. Give an added reimbursement when departments serve larger numbers of persons—either All-Day students, Young, or Adult Farmers.
   b. Establish six experimental centers wherein the teacher serves In-School students on a half-day basis, with the remainder of his time available for work with Adults and Young Farmers.
   c. A 50 per cent increase in payments to teachers for Young and Adult Farmer classes.
   d. Suggest to superintendents that non-vocational assignments to vocational teachers be kept to a minimum to give opportunity for more work with Young and Adult Farmers.
   e. Refrain from approving new full-time departments with potential enrollments under twenty-five.
   f. Encourage full-time departments with extremely low enrollments to cooperate with another school on a half-time basis.
   g. Encourage teachers to serve boys from part-time farms, provided that it does not curtail the program for full-time farm boys. Incidentally, two Ohio award winners, Wayne Vogel, 1952 Star Farmer of America, and Robert Lawyer, 1945 Regional Star Farmer, came from part-time farms and both are now farming full-time.

3. In addition to changes in administrative procedure and the small enrollment problem, consideration was given to other areas of the program.
   a. The Council has recommended the approval of all requests for new departments with facilities and a satisfactory number of potential students, even though it has resulted in a considerable reduction in the rate of reimbursement.
   b. With the support of the Advisory Council, departments with programs that are considered substandard have been placed on probation for one year with continued approval to be determined by the extent of improvement shown. Approval has been withdrawn from several departments.
   c. Administrative groups have given attention to teacher recruitment, and a brochure entitled "A Future For You . . . Teaching Vocational Agriculture" has been prepared and distributed by the Teacher Training Department.
   d. Emphasis has been placed on the value of a good summer program. As a result, most local Boards of Education determine the teacher's salary by applying the 4/3 factor in connection with the salary schedule in operation.
   e. The advantages and disadvantages of the integration of farm shop was sent to superintendents with the suggestion that they may wish to consider the adoption of this plan.
   f. Consideration of the question "Is the FFA Program too comprehensive?" resulted in approval of the present program. However, it recommended that advisers of Chapters with limited programs encourage more Future Farmers to participate in FFA activities. Advisers of Chapters with comprehensive programs were not encouraged to extend their programs.



Suggestions from the Ohio Advisory Committee have helped improve farm mechanics facilities. Robert Campbell, teacher of Vocational Agriculture, and members of his class at Tecumseh High School, Springfield, Ohio, are shown in his new farm shop.

You could well ask, "Couldn't these changes have been made without an Advisory Council?" or "Wouldn't you have made them anyway?" Most as-

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*The second of two articles. The first appeared in the April issue. (Ed.)

Editorial—(cont'd)

(Continued from Page 243)

student's program of graduate study that they could be part of a continuous research program. However severe these criticisms may be, the most disturbing fact is that the research in agricultural education is apparently not produced by persons with a persistent and compelling drive to investigate the problems of vocational agriculture. Do we have a lack of confidence in the results of research? Are we truly proficient in the techniques and procedures of research? Or do we consider research to be of secondary importance?

Another of the earlier criticisms that needs re-emphasis is the need for clarifying assumptions. Most of the studies in agricultural education are conducted by analyzing the result of a mailed questionnaire. The type of analysis most often used is merely the determination of sum averages and/or percentages. Most notably lacking in the reported studies are the assumptions basic to the use of the various instruments or techniques. Validity and reliability of the mailed questionnaire are apparently assumed in the majority of cases. Methods are assumed to be appropriate and differences are assumed to be real. The need for clarification is not necessarily to show that one method can explain the facts of a situation better than another. A more frustrating problem exists when the choice is between several methods each of which seems to explain the facts equally well. The criterion for making a choice is simplicity—analytical simplicity. Invariably, analytical simplicity is achieved by selecting the method requiring the fewer assumptions. It should be added, however, that such simplicity may not be accomplished by selecting methods that are more familiar, more easily comprehended or less laborious.

Clarification and testing of assumptions would allow both the investigator and the reader the opportunity to scrutinize the conclusions along with the evidence presented. The choice of a method of analysis does not affect this need. It remains as an important area of consideration for investigators if the general applicability and use of generalizations are to be known.

A further point somewhat related to the need for clear assumptions is a need for clarification of the category titled "Findings and Interpretations" in the reported summaries of studies. As reported now, it is very difficult to determine which is a "finding" and which is "interpretation." Both are important from the standpoint of applicability. It is even more important to know which is which. Findings sometimes exist with a probability of being true. If intermingled with interpretations, their function is not well served.

Sampling is another of the perennial problems of all research and also an area in which agricultural education research has been given generous portions of criticism in the earlier evaluation. Probably the most serious criticism that can be made, is in its frequent choice of judgment samples rather than probability samples. Judgment samples are samples in which the biases and sampling errors are not possible of calculation from the samples, but instead must be settled by judgment. Probability samples are those in which sampling errors can be calculated and in which biases of selection and estimation can be virtually eliminated or at least contained within known limits. The probability sample is usually taken according to a plan embodying automatic selection of the elements and neither the researcher nor the elements of the sample exercise choice in the make-up of the sample. Judgment samples on the other hand are obtained by procedures that depend on judgment of what is "typical" or "representative." Items are included in the sample by weighting factors described arbitrarily and the expert's opinion in making allowances for segments of the population that are unknown or at least unsampled.

It is completely fair to point out that both types of samples *can* and *do* deliver results. A limiting factor in the usefulness of judgment samples is that even experienced research workers cannot predict *why* or *when* useful results will be obtained.

Finally, there is need in agricultural education research to give careful thought to the last criticism offered by Dr. Lathrop in his 1935 evaluation — "that the possibilities of statistical procedures are not generally realized." In doing so it is no longer necessary, with modern methodology, to give consideration to one of his important 1935 criteria, "the law of the single variable." The control of all factors except one has until recently been a limiting factor in the choice of problems of research studies. Frequently such "control" has been accomplished only through definition. Newer methods have made it possible to use the students' farms and teachers' classrooms as laboratories with a number of factors observed and measured accurately, while varying simultaneously. The possibilities of research in agricultural education have grown enormously. Perhaps much of the research that has been completed in agricultural education is that for which relatively easy or obvious conclusions have been drawn. As more and more research is undertaken in agricultural education there will undoubtedly be greater concern for quality since, without it, there can be no consideration of value. □

Phi Delta Kappa, professional fraternity for men in education, has chosen Bloomington, Indiana, as the site of its permanent headquarters. An office building will be erected adjacent to the campus of Indiana University to be completed early in 1955 and preceding the biennial council meeting scheduled for December of that year. This meeting will mark the fiftieth anniversary of the Fraternity.

Let's Take Stock—

(Continued from Page 244)

1. Goals or objectives appropriate to the degree of development of pupils and in keeping with the purposes of the vocational agriculture department.
2. The selection and use of varied types of teaching and learning materials and experiences.
3. The adjustment of method and organization to conditions and needs of pupils as a group and as individuals.
4. The use of every legitimate means available in the evaluation of progress and quality of learning.
5. A personal relationship of confidence, respect, and helpfulness between the teacher and pupils, resulting in similar relationships between the school and community.
6. Provision for all desirable types of learnings.
7. Definite and adequate learning by the pupils as an outcome.

In the educational program of a good vocational agriculture department, major concern should be given to attaining desirable outcomes and to the various indications showing that such outcomes are being realized. It is very important that the teacher and pupils are happily and harmoniously cooperating in the stimulation of a wholesome curiosity about themselves and their immediate problems. The results of our teaching and counseling should show that pupils are securing knowledge and developing worthwhile skills, attitudes, tastes, appreciations and habits.

Among others, intangible qualities that are highly desirable outcomes may be listed as:

1. Cooperativeness
2. Tolerance
3. Openmindedness
4. Reverence
5. Respect for law
6. Self reliance

Evaluation of such outcomes is by no means easy; for most of them there is no standard measure and therefore evaluation of them necessarily will be largely a matter of judgment. The difficulty of the task is no reason for avoiding it, and the importance and universality of the problems involved make it imperative that attention should be directed to the attainment of such outcomes and to their proper evaluation.

A competent teacher is one of the indispensable elements of a good department. The teacher should be a person having common purposes and motivated by common ideals of the school. He should show awareness and understanding of educational problems and continuous professional growth. Before election to the staff each teacher should produce evidence of thorough preparation for his particular task and of possession of such personal traits as are requisite to teaching and associating with youth.

The number of teachers per department should be adequate for the cur-

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Studies in progress in agricultural education

Reported for the year ending May, 1954.

NORTH ATLANTIC REGION
Compiled by Henry S. Brunner, Pennsylvania State University

ALLISON, THOMAS J.—"Summer Activities of Teachers of Vocational Agriculture in Pennsylvania." Thesis, M. S., The Pennsylvania State University.

BARNES, LYLE G.—"The Relationship Between Occupational Choice of Former Students and Their Experience as Vocational Agriculture Students in the Dundee Central School." Problem, M. S., Cornell University.

BASS, BRUCE CARTER—"Young Farmer Instruction in Vocational Agriculture as an Influence on Adoption of Approved Practices and Establishment in Farming in Virginia." Thesis, D.Ed., The Pennsylvania State University.

BENNETT, ROBERT E.—"An Appraisal of Adults' Needs and Interests in Agricultural Education for Regional District No. 1." Project, M. S., The University of Connecticut.

BLANCK, RAYMOND H.—"The Occupational Growth of Former Vocational Agriculture Students in the Slippery Rock High School During the Period 1930-1950." Thesis, M. S., The Pennsylvania State University.

BLOUNT, WILLIE A.—"Adult Education Activities of Negro Teachers of Agriculture in North Carolina." Thesis, D.Ed., The Pennsylvania State University.

BRUNNER, H. S. AND STEVENS, GLENN Z.—"Participating Experience in Teaching and Its Relative Importance in the Preparation of Teachers of Vocational Agriculture." Staff study, The Pennsylvania State University.

CALLIS, MARVIN G.—"History of Vocational Agricultural Education in Garrett County, Maryland." Special problem, Department of Agricultural Education, University of Maryland.

CHAVEZ, DANIEL J. — "Economic and Sociological Developments and Trends Influencing the Vocational Agriculture Program in Secondary Schools." Thesis, Ph.D., The Pennsylvania State University.

CHERRY, EVANDER L.—"The Need for Different Courses of Study for Non-Farm and Farm Boys in Vocational Agriculture." Thesis, M. S., The Pennsylvania State University.

COFFIN, ROBERT F.—"Establishing Criteria for the Selection and Admission of Pupils into Vocational Education in Agriculture in New York State." Thesis, Ph.D., Cornell University.

COLLINS, WILLIAM—"A Study to Determine Present Practices in Secondary Student Teaching Programs in the Colored Colleges and Universities of Texas and the Improvements That Are Needed." Thesis, Ph.D., Cornell University.

COOK, JAMES L.—"The Use of School Facilities by Out-of-School Groups." Thesis, M. S., The Pennsylvania State University.

CRANE, E. WILLIAM—"An Evaluation of the Supervised Farming Programs in the Trumansburg Area, 1917-1947." Thesis, Ph.D., Cornell University.

CROSS, DONALD S.—"Personal, Economic and Social Factors Tending to Cause Young Men Not to Remain in Farming." Thesis, Ph.D., The Pennsylvania State University.

EVANS, WILLIAM H.—"Tenure and Retirement Status of Vocational Agriculture Teachers in New Jersey." Non-thesis study, Rutgers University.

EVANS, WILLIAM H.—"An Analysis of the Supervised Farming Program in 39 High Schools in New Jersey." Non-thesis study, Rutgers University.

GEE, JOHN R. JR.—"Technical Skills in Soils and Field Crops Requiring a Planned Demonstration for Effective Teaching, Needed by Beginning Teachers of Vocational Agriculture." Thesis, M. S., Department of Agricultural Education, University of Maryland.

GERHART, HENRY B.—"A Progress Report for Evaluating Periodic Achievement of Vocational Agriculture Students in Pennsylvania." Thesis, M. S., The Pennsylvania State University.

GIVENS, JAMES L.—"A Suggested Course of Study for Rural Electrification, Farm Buildings and Improvements for the Winchester, Virginia, Vocational Agriculture Department." Thesis, M. S., Department of Agricultural Education, University of Maryland.

GRAHAM, JOHN M.—"The Practicability of Crop Trials and Test Plot Activities in Vocational Agriculture." Thesis, M. S., The Pennsylvania State University.

HALL, WM. F.—"Pre-employment Education and Other Experiences of 1944-53 (321) Graduates from The Pennsylvania State University, Curriculum in Agricultural Education, as Related to Tenure (and Other Factors Indicative of Success) in Teaching Vocational Agriculture." Staff study, The Pennsylvania State University.

HARTSHORN, HOWARD J.—"Development of F.F.A. Television Programs in Pennsylvania." Thesis, M. S., The Pennsylvania State University.

HOOVER, N. K.—"Vocational Agriculture in High School as Preparation for Occupations Related to Agriculture, with Particular Reference to Pennsylvania Conditions." Thesis, Ph.D., The Pennsylvania State University.

HOOVER, N. K. AND STEVENS, G. Z.—"Determination of Efficiency Factors and Standards, Selection of Sampling Methods, and Relation of Efficiency Achieved to Approved Practices Employed in Farm Enterprises in Vocational Agriculture in Pennsylvania." Staff study, The Pennsylvania State University.

JOHNSON, OVERTON R.—"Means of Production and the Use and Value of Woodchips from Farm Woodlots and the Implications for Forestry Education." Thesis, Ph.D., Cornell University.

JONES, RICHARD N.—"Home Farm Shops in Pennsylvania." Thesis, Ph.D., The Pennsylvania State University.

JULIANO, JORGE P.—"Adequacy of the Technical Training of Teachers of Vocational Agriculture in Philippine High Schools." Thesis, M. S., The Pennsylvania State University.

KNAUER, DANIEL B.—"A Local Level Professional Improvement Program for Teachers of Vocational Agriculture." Thesis, D.Ed., The Pennsylvania State University.

KOBLE, DANIEL E. JR.—"Non-technical Books for F.F.A. Members with Suggestions for Their Use in the High School Reading Program." Non-thesis study, The Pennsylvania State University.

KOBLE, DANIEL E. JR.—"A Farming Program Record Book for Young Farmers in Vocational Agriculture." Thesis, M. S., The Pennsylvania State University.

LANGE, GEORGE W.—"Survey of High School Farm Shops for Safe Facilities and Safe Shop Practices." Non-thesis study, Rutgers University.

LENT, ROBERT—"A Study to Determine How the Agricultural Program in LeRaysville, Pennsylvania Can Be Readjusted to Meet the Needs of Pupils in the Community." Thesis, M. S., Cornell University.

LEWIS, GLENN W.—"Factors That Influence the Establishment of Vocational Agriculture Graduates in Talbot County, Maryland." Thesis, M. S., Department of Agricultural Education, University of Maryland.

LONG, WILLIS A.—"A Critical Study of School Consolidation in the State of Florida from 1940 to 1953." Thesis, D.Ed., The Pennsylvania State University.

LUDERS, CLIFFORD—"The Development of Core Units of Instruction in Work Simplification for Pupils in Vocational Agriculture." Thesis, M. S., Cornell University.

MACARTHUR, EARL — "The Organization and Development of a Young Farmer Program for the Candor Central School." Study, M. Ed., Cornell University.

MALCOLM, JOSEPH RICHARD—"The History and Development of West Virginia F.F.A. Camp and Conference Center." Thesis, M. S., West Virginia University.

MARTINEZ-ACEVEDO, REINALDO J.—"Factors that Will Promote the Further Development of Young Farmer Instruction in Vocational Agriculture." Thesis, Ph.D., The Pennsylvania State University.

MAZER, HOMER F.—"Present Status of Former Graduates from Vocational Agriculture in the Berlin-Brothersvalley Joint High School." Non-thesis, The Pennsylvania State University.

MCCLAY, DAVID R. — "Physical Plant and Equipment Requirements for Departments of Vocational Agriculture in Pennsylvania High Schools." Staff study, The Pennsylvania State University.

MCFARLAND, FRANK R. JR.—"A History of the Maryland Sheep Breeders' Association And an Attempt to Suggest Policies to Guide the Cooperative Agricultural Extension Worker in his Relationships with Agricultural Commodity Organizations." Special problem, Department of Agricultural Education, University of Maryland.

MIHUKA, MIRON—"The Reading Ease of Textbooks Used as References in Dairying in Vocational Agriculture Classes." Problem, M. Ed., Cornell University.

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MILLER, HAROLD W.—"A Comparison of Experimental Teaching Patterns for Solving Farm Fertility Problems with Existing Patterns for Solving Similar Problems." Thesis, Ph.D., Cornell University.

MOTT, EDWARD B. — "An Analysis of Equipment and Furniture Needs as Facilities in the Teaching of Vocational Agriculture in New York High Schools." Thesis, Ph.D., Cornell University.

MULLER, RAFAEL P. — "Factors Affecting the Program of Young and Adult Farmer Classes in Puerto Rico." Thesis, M. S., The Pennsylvania State University.

MULLER, RAFAEL P.—"Procedures and Practices of the Puerto Rico F.F.A. Loan and Award Association." Non-thesis study, The Pennsylvania State University.

MURRAY, RAY A. AND AHALT, ARTHUR M.—"How Young Farmers Become Established." Non-thesis study, Department of Agricultural Education, University of Maryland.

PAVKA, JOHN—"A Comparative Study of the Resources of Two School Areas." Thesis, M. S., Cornell University.

PEPPE, ANTHONY — "The Effectiveness of Future Farmer Activities in Wayne County, New York." Study, M. S., Plan B, Cornell University.

RANKIN, GLENN F.—"Guidance Services Performed by Negro Teachers of Vocational Agriculture in North Carolina." Thesis, D.Ed., The Pennsylvania State University.

RATCLIFFE, RUSSELL S. — "Comparative Education in the Field of Agriculture —Western Europe and the United States." Special problem, Department of Agricultural Education, University of Maryland.

REED, IRVING — "Evaluation and Effectiveness of Veterans Training Program of the Delhi Central School." Study, M.Ed., Cornell University.

RUSSELL, JULIUS—"Junior Projects in Pennsylvania." Thesis, M. S., The Pennsylvania State University.

RUTLEDGE, RAY—"The Use of Approved Practices Among Farmers Who Have Had Systematic Instruction in Vocational Agriculture as Compared with Those Who Have Had No Systematic Instruction." Thesis, Ph.D., The Pennsylvania State University.

SALTZER, ROBERT — "Development of a Course of Study in Vocational Agriculture for Manchester Central School." Thesis, M. S., Cornell University.

SCHULTZ, DENTON — "Establishing an Effective Feed Service Program for Farmers." Study, M. S., Plan B, Cornell University.

SMITH, GLENN E.—"Farming Status of Former Vocational Agriculture Students in Gap Mills Area." Problem, M. S., West Virginia University.

STEVENS, GLENN Z.—"Supervision and Administration of Instruction in Vocational Agriculture with Particular Reference to the Principles of Educational Sociology Involved in the Community School Concept." Staff study, The Pennsylvania State University.

STEVENS, GLENN Z. AND BRUNNER, H. S.—"Organization and Appraisal of Learning Experiences for Students in Selected Resident Instruction Courses in the College of Agriculture." Staff study, The Pennsylvania State University.

STEVENS, STRATTON B. — "Soil and Water Conservation Practices Presently Used and Those Needed on the Farms in Wyoming County, Pennsylvania." Thesis, M. S., The Pennsylvania State University.

THOMPSON, ORVILLE E., TOM, FREDERICK K. T.—"A Comparison of an Experimental Teaching Pattern with Existing Patterns of Teaching in New York." Thesis, Ph.D., Cornell University.

TURNER, L. L.—"Planning Facilities for a Department of Vocational Agriculture at Glastonbury." Project, M. S., The University of Connecticut.

VAN DYKE, FRED H.—"Soil Testing as an Integral Part of the Program of Vocational Agriculture in Illinois." Thesis, M. S., The Pennsylvania State University.

WALTER, ROGER—"A Study of Former Pupils in the Clyde Vocational Agriculture Department." Problem, M. S., Cornell University.

WILHELM, LLOYD W. — "An Appraisal of Adults' Needs and Interests in Agricultural Education for Glastonbury." Project, M. S., The University of Connecticut.

WISE, WILMER E.—"An Analysis of Efficiency in Field Corn Production by Vocational Agriculture Students as Calculated from Record Books Entered in the 1953 State Project Contest." Non-thesis study, The Pennsylvania State University.

ZOOK, LESTER M.—"A Study of Colonization with a View to a Particular Proposal for the Mixteca Region in Mexico." Thesis, Ph.D., The Pennsylvania State University.

NORTH CENTRAL REGION

Compiled by Ralph E. Bender, Ohio State University

ALBRACHT, JAMES J.—"Problems Male Graduates of the Hebron High School Face in Adjusting to Out-of-School Life." Thesis, M. S., University of Nebraska.

ALDINGER, STANLEY — "Occupations of Farm-Reared Boys in North-Central Iowa Who Were Graduated from High Schools Offering Vocational Agriculture." Thesis, M. S., Iowa State College.

ARCHER, BEVERLY; CRAWFORD, HAROLD; MILLER, JIMMY; AND STUDT, DALE—"Effectiveness of Vocational Agriculture as Indicated by Improved Farming Practices Used by Former Students." Theses, M. S. and Agricultural Experiment Station Project, Iowa State College.

BADRAN, M. K.—"A Description of the Change in the Conception of the Role of the Teacher of Agriculture as Expressed by Prospective Teachers and Teachers of Agriculture." Thesis, Ph.D. University of Illinois.

BEAMER, R. W.—"Reconstruction of the Undergraduate Professional Courses in Agricultural Education at the University of Tennessee." Thesis, Ed.D., University of Illinois.

BEOUGHER, CLYDE E. — "Evaluation of Instruction in Tractor Preventative Maintenance in Vocational Agriculture." Thesis, M. Sc., The Ohio State University.

CARTER, JOHN T.—"A Study of Agricultural Instruction in Junior Colleges, with Special Attention to the Development of the Program at Clarke Memorial College." Thesis, Ed.D., University of Illinois.

CENTRAL REGION RESEARCH CONFERENCE, COMMITTEE ON LOCAL POLICIES AND PROGRAMS — "Multiple-Teacher Departments of Vocational Agriculture in the Central Region." Non-thesis, University of Illinois.

COFFEY, HOWARD H. — "Procedures Used in Teaching Farm Management." Thesis, M. Sc., The Ohio State University.

COX, CHARLES A. — "Effectiveness of Methods of Teaching Adult Farmer Classes in Virginia." Thesis, M. S., Iowa State College.

DEYOE, GEORGE P.—"Methods Effective for Developing Farming Programs with Adult Farmers Enrolled for Instruction." Non-thesis, University of Illinois.

EKSTROM, G. F., AND OTHERS—"Curriculum Needs in Practical Arts, Missouri Rural and Village High Schools." (Case Studies.) Non-thesis, University of Missouri.

ELLIOTT, DEAN A.—"Role of Agricultural Education in the Development of Agriculture in Ethiopia." Thesis, Ph.D., Iowa State College.

FRAKER, JOHN W.—"Follow-Up Study of Vocational Agriculture Graduates of Kenton High School." Thesis, M.-Sc., The Ohio State University.

FRIDLINE, CLARENCE R.—"Teaching Plans for Study of Hay and Pasture Production." Non-thesis, The Ohio State University.

GINGERY, BURNELL E.—"An Analysis of the Responses of Nebraska Veterans Enrolled in Institutional On-Farm Training Regarding Financing Future Adult Courses in Agriculture." Thesis, M. S., University of Nebraska.

GREEN, DONALD G., AND WALL, JAMES E.—"Training of Employees in Farm Marketing and Supply Businesses." Theses, M. S., Iowa State College.

HAMLIN, H. M.—"Activities, Accomplishments, and Problems of Advisory Committees for Agricultural Education in Illinois." Non-thesis, University of Illinois.

HAMLIN, H. M.—"Future Needs for Agricultural Education in Certain Illinois Communities." Non-thesis, University of Illinois.

HASTINGS, CHARLES—"A Plan for Teaching Farm Mechanics on an Integrated Basis in the Clyde Community." Non-thesis, The Ohio State University.

JOHNSON, CARLTON—"Extent and Nature of the Needs of Iowa Farmers for Instruction in the Use of Farm Electricity." Thesis, Ph.D., Iowa State College.

KREBS, A. H.—"Guidance Problems of Boys in Vocational Agriculture and Guidance Activities of Teachers of Vocational Agriculture." Non-thesis, University of Illinois.

LARSON, VERNON—"A Study of Short-Course Program at Land Grant Colleges." Thesis, Ed.D., Michigan State College.

LUSTER, GEORGE — "Selected Characteristics of Freshmen in the College of Agriculture with Implications for Guidance." Non-thesis, The Ohio State University.

LUSTER, GEORGE—"Curricula for Pre-Service Preparation of Teachers of Vocational Agriculture in the North-Central Region." Thesis, Ph.D., The Ohio State University.

MARTIN, SHERIDAN E. — "Approved Farm Practices and Management Returns of Participants in the Veterans Farm Training Program in Central Iowa on Family Commerial Farms." Thesis, M. S., Iowa State College.

MCNUTT, WILLIAM A.—"Plans for the Integrated Teaching of Farm Mechanics in the North-Central States." Non-thesis, The Ohio State University.

MORRIS, JESSE A.—"A Study of the Program of Vocational Agriculture in the Leake County, Mississippi, Agricultural High School 1938-52." Thesis, M. A., Michigan State College.

NIELSEN, DUANE M.—"Opinions of Selected Instructors of Vocational Agriculture Concerning the Adequacy of Pre-Service Training for Developing Farm Mechanics Abilities of Day School Students." Thesis, M. S., University of Nebraska.

NOLAN, HOWARD D. — "The Use of Teaching Aids in the Adult Classes of Selected Teachers of Vocational Agriculture in Ohio." Thesis, M. Sc., The Ohio State University.

RITCHIE, AUSTIN E. — "Criteria for Evaluating Beginning Teacher Programs in Agricultural Education." Thesis, Ph.D., The Ohio State University.

RYDER, GORDON J. — "A Program of Teacher Preparation in Farm Mechanics Education for Vocational Agriculture." Thesis, Ph.D., The Ohio State University.

SAUTTER, JOHN H.—"Factors Influencing Farmers in Certain Townships of Knox County to Adopt Soil Conservation Practices." Thesis, M. S., University of Nebraska.

SCHULTZ, ELVIN C.—"A Study to Determine the Extent to Which Undergraduate Training in Technical Agriculture Has Been Adequate for Teaching Vocational Agriculture." Thesis, M. S., University of Nebraska.

SIMMONS, CARL W. — "The Use of Time of Instructors of Vocational Agriculture in Nebraska High Schools." Thesis, M. S., University of Nebraska.

SLEDGE, GEORGE — "A Technique for Evaluating Leadership Abilities of Future Farmers." Special Problem, Michigan State College.

SLEDGE, GEORGE — "Relationships Between Some Pre-Teaching Characteristics and Subsequent Performance of Teachers of Vocational Agriculture in Michigan." Thesis, Ed.D., Michigan State College.

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SOUTHERN REGION

Compiled by J. Bryant Kirkland, North Carolina State College

BAILEY, LEO L. — "A Suggested Program of Work For Graduate Students In Agricultural Education." Thesis, Ph.D., Louisiana State University.

BENNETT, EARL M.—"What is the Job of the Vocational Agriculture Teacher in the Puryear Community." Thesis, M. S., University of Tennessee.

BOYD, W. S.—"A Follow-Up Study of Young Men From Central High School Who Have Taken Vocational Agriculture During the Period 1948 to 1953." Problem, M. Agr. Ed., North Carolina State College.

BRASFIELD, DORACE — "Some of the Farm Mechanic's Jobs Needed by Farmers in the Hornbeak High School Area." Thesis, M. S., University of Tennessee.

BRYANT, W. L.—"Developing a Method of Planning Programs of Vocational Agriculture to Meet the Community Needs." Problem, M. Agr. Ed., North Carolina State College.

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CASSIDY, J. F. — "An Occupational Study of Former Students of Vocational Agriculture in Wilton High School from 1936 to 1952." Problem, M. Agr. Ed., North Carolina State College.

COLSTON, HENRY C.—"Using An Advisory Council to Plan, Conduct and Evaluate A School Community Program of Vocational Agriculture." Thesis, M. S., University of Tennessee.

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DAVIS, H. L.—"Developing a Farm Mechanic's Program for Adults in the Saltillo High School Community." Thesis, M. S., University of Tennessee.

DELONEY, J. B.—"Vocational Agriculture As A Part of The Community School." Thesis, M. S., University of Florida.

DENNY, R. J.—"A Study to Determine the Uses Made of Supervised Farming Records." Problem, M. Agr. Ed., North Carolina State College.

DOBBS, MARVIN C.—"Individuals Reached In a Program of Vocational Agriculture." Thesis, Ph. D., Louisiana State University.

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HARRIS, CHARLES, JR. — "Determining Differences in Farm Machinery, Power Tools, Machinery Repair Facilities, and Repairs Made in the East Robertson County Areas As Related to Types of Farming and Tenure Status." Thesis, M. S., University of Tennessee.

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HUCKS, C. P.—"A Follow-Up Study of Majors in Agricultural Education at Clemson College." Thesis, M. S., Clemson College.

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JONES, A. C.—"Developing A Community Program of Work." Thesis, M. S., University of Tennessee.

LUCAS, CLYDE C.—"The Use of Time by Teachers of Vocational Agriculture." Thesis, M. S., Clemson College.

PEEK, STANLEY LOUIS — "A Suggested Plan for Coordinating the Work of Agricultural Agencies at the County Level." Thesis, Ph. D., Louisiana State University.

PHILLIPS, R. A., JR.—"Evaluation and Improvement of Adult Farmer Program in Vocational Agriculture for the Morris Chapel Community." Thesis, M. S., University of Tennessee.

RIGSBY, ELIAS R. — "Improving The Production of Beef Cattle in the Pebble City Community of Mitchell County, Georgia." Problem, M. Ed., University of Georgia.

ROBERTS, THEODORE—"A Study of the Technical Competencies Needed By The Teacher of Vocational Agriculture In Helping Farmers and Farm Boys With Their Problems of Swine Production." Problem, M. Ed., University of Georgia.

ROCHESTER, STEVE—"Financing the Local FFA Chapter in South Carolina." Thesis, M. S., Clemson College.

TAYLOR, LOUIS C. — "Evaluation of Practices Used by Tennessee Teachers of Vocational Agriculture in Planning, Conducting and Evaluating Progress for Adult Farmers in Tennessee." Thesis, M. S., University of Tennessee.

TAYLOR, SILAS J.—"What is A Good Summer Program for Tennessee Vocational Agriculture Teachers." Thesis, M. S., University of Tennessee.

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WATSON, B. L.—"The Relationship Between Subjects Taken in High School by Vocational Ag. Students and Their Performance During the Freshman Year at an Agricultural College." Thesis, M. S., North Carolina State College.

WEATHERFORD, JERALD C. — "Determining the Need for an Instructional Program in Vocational Agriculture for Young Farmers in the Rives School Community and Developing A Program of Instruction That Will Effectively Meet This Need." Thesis, M. S., University of Tennessee.

WYSE, J. F.—"A Follow-Up Study of Former FFA Members of the Johnson, S. C. High School." Thesis, M. S., Clemson College.

PACIFIC REGION

Compiled by Leo L. Knuti, Montana State College

BLACKWELL, JAMES H. — "Teaching Soils in Oregon." A paper in partial fulfillment for the Master of Agriculture Degree, Department of Agricultural Education, Oregon State College.

DAVEY, DORCEY — "Follow-up of Agricultural Education Graduates at Oregon State College." A paper in partial fulfillment for the Master of Agriculture Degree, Department of Agricultural Education, Oregon State College.

EDMAN, VICTOR GLADDEN—"The Agricultural Skills Needed by Beginning Teachers of Vocational Agriculture in the Irrigated Areas of the Southwest." Problem, M. Ag. Ed., Department of Agricultural Education, University of Arizona.

FREEBURY, DONALD L. & HOWRY, ROBERT S.—"Machinery Maintenance and Repair Practices of Farmers." M. S. Special Problem, Department of Agricultural Education, Montana State College.

HENDRICKS, ROLAND A.—"Use of Time by Vocational Agriculture Teachers in Oregon." Thesis, partial fulfillment for the EdM, Department of Agricultural Education, Oregon State College.

HENDRICKS, ROLAND A.—"The Use of Sample Farms in Teaching Vocational Agriculture." Non-thesis study, Department of Agricultural Education, Oregon State College.

JOHNSON, LAWRENCE—"Job Analysis of Hatching, Brooding, and Laying in Poultry Production — for Vocational Agriculture Instructors in Oregon." Non-thesis, Poultry Department, Oregon State College.

KOOPMAN, NORMAN—"Integrating Farm Crops and Animal Husbandry in a High School Program." A paper in partial fulfillment for the Master of Agriculture Degree, Department of Agricultural Education, Oregon State College.

LAWSON, LLOYD—"Guidance Responsibilities of Vocational Agriculture Teachers as Viewed by Former and Present Students." Master's Report Ag. Ed. Department of Vocational Education, Colorado A & M College.

MERL, WILLIAM LAWRENCE—"The Agricultural Geography of the Hood River Valley as it Pertains to Teaching Vocational Agriculture." Undergraduate study, Department Natural Resources, Oregon State College.

PATRICK, PAUL—"Determining Preparation in Farm Mechanics Essential for Vocational Agriculture Instructors in Oregon." A paper in partial fulfillment for the Master of Agriculture Degree, Department of Agricultural Education, Oregon State College.

SHOWMAN, ELMER—"An Evaluation of High School Vo-Ag Texts." M. S. Special Problem, Department of Agricultural Education, Montana State College.

WARD, DARREL L.—"Evaluating Master Chapters in Oregon." Undergraduate study, Department of Agricultural Education, Oregon State College.

WEBER, ROBERT—"Use of Periodicals by Vo-Ag Departments." M. S. Special Problem, Department of Agricultural Education, Montana State College.

WESTFALL, FRANK—"Occupational Status of Former Students of the Deer Lodge Vo-Ag Department." M. S. Special Problem, Department of Agricultural Education, Montana State College.

Let's Take Stock—

(Continued from Page 250)

riculum offered, the school's enrollment, and the special needs of the boys and the community. The teaching load and the total *working* load should be such as not to endanger educational efficiency. Each teacher should have broad, general scholarship, thorough preparation in his special field, professional competence, and reasonable social development.

The agriculture building is one of the major conditioning factors in a department. Its intimate relation to and influence on the agricultural educational program and its outcomes are not always appreciated and understood. The vocational agriculture program may be seriously restricted and impeded or it may be made more practical with little or no difference in cost of the building.

Administration is necessary in order to coordinate the total educational program. There should always be a sympathetic and understanding relationship between the vocational agriculture department and the school principal, the superintendent, and the local board of education.

Of course we must keep in mind the six main objectives for vocational agriculture as listed in *Educational Objectives in Vocational Agriculture*. For a review here they are:

1. To make a beginning and advance in farming.
2. To produce farm commodities efficiently.
3. To market farm products advantageously.
4. To conserve soil and other natural resources.
5. To manage a farm business.
6. To maintain a favorable environment.

If we are to achieve the end objectives in agricultural education, that is, abilities which function out of school, then we must assume that education is a conscious process and understandable to those undergoing it.

This assumption implies that the learners will share:

1. In determining the objectives of their own education.
2. In choosing the ways and means of attaining these objectives.
3. In evaluating the outcomes.

Therefore, it seems that *JOB 1* is to pursue a prime objective in life. That being the case — there should be no doubt in our minds that we need to take stock of our situation and act accordingly. □

Our Advisory Council—

(Continued from Page 249)

suredly some of them would have been made. However, a number of them were definitely suggested by the Council, and all of them have its approval. Furthermore, I am confident that the changes received better acceptance because local representatives had a part in determining them.

It is difficult to measure the total result of the Advisory Council. The members have given many good suggestions, and their counsel has been very helpful. The Chairman, County Superintendent W. A. Whitman, made a very valuable contribution during our annual Conference program when he discussed the subject, "A School Administrator Looks at Vocational Agriculture." He has also discussed the program very effectively in a number of superintendent-teacher meetings. Certainly the contacts that members of the Council have provided with their respective organizations would rank high. Through it all, members of the state staff understand better the problems of the local administrators, and local people are more informed in regard to the objectives, policies, and procedures in the Vocational Program. This has been mutually beneficial. □

Great men are they who see that spiritual is stronger than any material force; that thoughts rule the world.—Ralph Waldo Emerson

Theme for June - - -

The Summer Program

Include in your plans for the summer some time to write an article for the *Magazine*. In addition to helping others you can improve yourself professionally by preparing a story of some accomplishment or solution to a problem. The summer time provides a good opportunity to obtain pictures to illustrate your story. See the themes for future months in the April issue.

Teachers evaluate their preparation

The response of experienced teachers concerning the value of college courses completed

JOE P. BAIL, Teacher Education, West Virginia University

Joe P. Bail

THE constantly changing picture in Agriculture brought about by advances in science, mechanization of farms, percentage of total population in the farming business, and other factors too numerous to mention necessitates the continued scrutiny of the training of agricultural leaders. The Vocational Agriculture teacher is no less affected than others, perhaps more so. New ideas and methods of teaching, along with newer philosophies of education, all tend to bring about changes in the curriculum for the training of prospective teachers in the field of Agriculture. The Vocational Agriculture teacher is unique in that he must have both the theoretical and practical end of farming. The curriculum for the training of Vocational Agriculture teachers must attempt to keep a balance between scientific agriculture on the one hand and humanities and professional education on the other. It is the responsibility of the teacher training institution, together with assistance from the segment of the population that it serves, to formulate the curriculum to meet the various and diverse needs.

Course Evaluation

In an effort to evaluate courses taken on the undergraduate level, a questionnaire was sent to all the Vocational Agriculture teachers in the State. They were asked to rate the courses taken with the following statement in mind: How valuable do you regard this course in teaching vocational agriculture? Three classifications were proposed: *High*—most essential; *Average*—desirable, but not essential; *Low*—least essential.

In addition, the ratings above were assigned a value of 5, 3, and 1 respectively. This gave an index to the overall rating of the course in the opinion of the instructors actually doing the job of teaching Vocational Agriculture. The results were summarized into groups on the basis of the number of years that the teacher had been on the job and finally grouped together.

From this survey have come many implications for changes, substantiated by the actual results of teachers' experience. A committee* representative of Vocational Agriculture teachers, principals, superintendents, laymen and farmers, plus the Dean of the College of Agriculture, compiled and assembled the information into a prospective curriculum for preparing the Vocational Agriculture teacher.

It is the hope of the committee that a worthwhile contribution to the training of the Vocational Agriculture teacher will emerge from the collective thinking of all those concerned.

Classification of Courses

The questionnaire used was broken down into technical agriculture, professional education, sciences, and other required courses, including humanities. All courses, or the majority of courses taken by students, were listed. Required courses were indicated by an asterisk with special attention given to them. Space was also provided for the listing of additional courses which would be of value to vocational agriculture teachers. This information, plus the experience and observations of the committee members, was the basis of the proposed new curriculum. The following tables give a summary of the questionnaires as they were received from vocational agriculture teachers.

Summary of Ratings
Table I—Technical Agriculture (by major fields)

Course	*High* (5)	*Average* (3)	*Low* (1)	*Average Rating*
Ag. Economics	60	45	18	3.97
Ag. Mechanics	101	12	—	4.78
Agronomy and Genetics	114	40	3	4.41
Animal Husbandry	92	29	2	4.46
Poultry Husbandry	40	24	1	4.20
Animal Pathology	29	10	3	4.45
Dairy Husbandry	72	26	—	4.47
General Entomology	12	16	18	2.74
Horticulture	59	37	—	4.23
Bacteriology	13	19	3	3.57
Total	592	258	48	4.21

It was the consensus of opinion of vocational agriculture teachers that a well-rounded groundwork of courses in technical agriculture was desirable. Adequate training in agricultural mechanics was especially pointed out as being necessary if a good job of teaching agriculture would be done.

In the area of professional courses, course work in agricultural education with emphasis on student teaching and materials and methods received greatest sanction by the teachers in the field.

Table II—Professional Courses

Course	*High* (5)	*Average* (3)	*Low* (1)	*Average Rating*
General Education	52	114	88	2.72
Ag. Education	135	11	—	4.85
Total	187	125	88	3.49

Other courses in the professional field were frequently criticized as being too general and not of specific value to vocational agriculture teachers. Consequently, they received a much lower rating on the scale.

Table III—Science

Course	*High* (5)	*Average* (3)	*Low* (1)	*Average Rating*
General Biology and Botany	48	28	—	4.02
Chemistry	51	56	14	3.61
Others	33	28	4	3.90
Total	132	102	18	3.94

The group of courses listed as science received, as a whole, the support of vocational agriculture teachers as desirable and necessary for a strong foundation in technical agriculture. Most teachers also qualify in biological science as a second teaching field.

Table IV—Other

Course	*High* (5)	*Average* (3)	*Low* (1)	*Average Rating*
English	53	34	8	3.95
Speech	28	7	—	4.60
History	3	10	5	2.77
Humanities	14	22	11	3.12
Total	98	73	24	3.76

In the final group of courses, special emphasis on speech and English received the approval of teachers as being most essential for vocational agriculture teachers. Although these results

Table V—Rank of Various Areas

1. Technical Agriculture	4.21
2. Science	3.94
3. Other Required Courses	3.76
4. Professional Subjects	3.49

are not conclusive in themselves, they gave a good indication of what courses present-day vocational agriculture teachers think a prospective teacher in the field should take on the undergraduate level. □

Nothing astonishes men so much as common sense and plain dealing.—Ralph Waldo Emerson

*The author is chairman of the Sub-Committee on Teacher Education in Agriculture set up by the State Board of Education.

Some professional characteristics of the Vo-Ag teacher*

The vocational agriculture teachers of Virginia: their training, experience, professional improvement and salary status

OVERTON R. JOHNSON, Graduate Assistant, Cornell University

Overton R. Johnson

WITHIN recent years increasing emphasis has been placed upon the educational preparation and professional improvement of teachers. There has been a trend toward extending the requirements of professional and technical training in educational institutions. Certification requirements have also been increased. The Virginia State Board of Education, in keeping with these educational developments, has continuously exerted efforts to increase the scope and and quality of the educational program of the State. All teachers have been encouraged to improve themselves professionally, and means of compensation for this improvement have been made.

As a result of these developments a question arises as to the training, experience, professional improvement, and salary status of the vocational agriculture teachers.

The purpose of this study has been to answer the following questions:

1. What is the educational preparation of the vocational agriculture teachers of Virginia?
2. To what extent are the teachers improving professionally?
3. What is the teaching experience of the teachers?
4. What is the salary status of the teachers?
5. What are the possible factors affecting the professional improvement of the teachers?
6. Is there a difference in the education preparation of the teachers who were trained in out-of-state institutions and those who were trained in Virginia institutions?

The Method of Study

This study was delimited to 134 Negro teachers who are now teaching vocational agriculture in the State of Virginia and six teachers who are on educational leaves of absence.

The questionnaire technique of the normative survey method of research was applied in obtaining the data for this study. Questionnaires were distributed to 140 vocational agriculture teachers through the cooperation of the State and Area Supervisors and Itinerant Instructors of Vocational Agriculture. Ninety-two replies were received and eighty-seven of these, sixty-four percent, were used in this study.

*Based on a study completed in partial fulfillment of the requirement for the Master of Science degree, Cornell University, 1952.

Initial Preparation for Teaching

Teachers have been graduated from standard four-year colleges and have in many cases exceeded the number of semester hour credits in Education and technical agriculture courses recommended by the State Board of Vocational Education. However, sixteen teachers, or 18.1 percent, are deficient in technical agriculture courses and thirty-two, or 36.5 percent, are deficient in Education courses.

Nearly all of the teachers prepared specifically as undergraduates to teach vocational agriculture. General science provided the most frequent choice for a minor field of specialization.

All certificates held by the teachers are Collegiate Certificates or above. The statutory minima of educational qualification requirements for certification have been fulfilled by these teachers and many have exceeded the requirements. This does not mean that these teachers have fulfilled the minimum number of credits in professional Education and technical agriculture courses as recommended by the State Board of Vocational Education. This is only a recommendation wherein the certification qualifications are statutory requirements.

Post-service Preparation

Teachers of vocational agriculture seek to improve themselves professionally. More than half of the teachers have obtained some professional improvement. Amounts vary from the equivalent of the hours of credit in a single course to those beyond the usual requirements for the Master's degree, the range being from three to forty-three. The mean average number of professional improvement hours obtained is 14.5. The teachers obtained more than three-fourths of their semester hour credits in professional improvement in Education courses. A very limited number of hours was obtained in agricultural engineering and administration and supervision courses.

The teachers in this study used "short-unit courses" more frequently than any other method in obtaining their professional improvement. This method was followed by a combination of "summer-session" and "short-unit courses" in frequency of use.

The services of Virginia State College are utilized by the teachers to obtain professional improvement more than the services of any other institution. However, almost half of the teachers have sought professional improvement in educational institutions other than those in Virginia.

The teachers have used their hours of professional improvement toward obtaining advanced degrees. Three of the teachers hold the Master's degree, and one of these teachers indicated that he is working toward the doctorate degree. Nearly three-fourths of the teachers are working toward the Master's degree.

Tenure and Experience

There is a range in teaching experience among the teachers studied of one to twenty-one years. The mean average number of teaching years in vocational agriculture is five and is comparable to the mean average number of all teaching years, which is 5.8.

Among twenty-four teachers, or 27.5 percent, there is a variety of teaching experience other than vocational agriculture. These experiences were gained in the elementary grades, academic subjects in high school, college teaching, and agricultural extension work.

As expected, the regular vocational agriculture teachers have much more teaching experience than the assistant vocational agriculture teachers.

As expected in the teaching profession, teachers of vocational agriculture tend to obtain professional improvement in greater amounts as the number of years of experience increases. Professional improvement is being obtained in greater amounts by teachers with seven to ten years of teaching experience. The type of position held, regular vocational agriculture teacher or assistant vocational agriculture teacher, influences to some degree the amount of professional improvement obtained. The more experienced teachers have obtained a greater mean average number of professional improvement hours than the less experienced teachers regardless of the number of children which they have.

Salaries

Teachers had a salary range for 1951-52 of $2,500 to $4,300 with a mean average salary of $3,148. Forty-three and one tenth percent of the teachers were earning less than $3,000. Teachers had a salary range in 1950-51 of $2,400 to $4,200 with a mean average salary of $3,000. Half of the teachers during this period were earning less than $3,000.

A comparison of the present average salaries of the teachers in this study with the present average salary of all vocational teachers of Virginia revealed that the teachers of this study are receiving a mean average salary of $116 less than the mean average salary of all vocational teachers.

Teachers with six or more hours of professional improvement tend to receive higher salaries than those with less than six semester hours. Regular vocational agriculture teachers, as expected, receive higher salaries than assistant vocational agriculture teachers.

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However, the difference in salaries received is not marked. Teachers also tend to receive higher salaries as their years of experience increase. Teachers with the lowest type of certificates tend to receive lower salaries, and those with the highest type of certificates are among the highest paid teachers. This is to be expected and is in keeping with the practices of the profession.

Reasons for Professional Improvement

The factors which have motivated teachers to obtain professional improvement in the order in which they were named by the teachers are: (1). To meet the needs for performing the job of vocational agriculture teacher; (2) a personal desire; (3) to obtain an advanced degree; (4) to meet local school requirements; (5) to secure a better job; (6) to meet the requirements of the state program of Agricultural Education; (7) to increase salary; (8) to hold job; and (9) advice from the supervisory or Teacher-Trainer Departments.

Teachers named the factors limiting their pursuit of professional improvement in the following order: (1) Distance to institutions offering professional improvement courses; (2) other family responsibilities; (3) number of children; (4) expense of professional improvement; (5) inability to secure leave of absence; and (6) professional courses desired were not offered.

The differences in the educational preparation between those teachers who were trained in out-of-state institutions and those who were trained in Virginia institutions are so very slight that the two groups may be considered equal in this respect.

Teachers are actively engaged in the work of local, regional, state, and national professional organizations. Sixteen and two tenths percent of the teachers hold positions of leadership within these organizations. The largest number of teachers are members of the Old Dominion Vocational Association. The next largest numbers are members of the Virginia Teachers Association and the American Vocational Association. This is to be expected.

Interpretations

Even though the teachers in this study have been graduated from standard four-year colleges or universities, there is a considerable number who are deficient in the number of hours of credit recommended in technical agriculture and Education courses. The number is of sufficient size to warrant the attention of administrators and supervisors of vocational education in agriculture and the institutions training such teachers to a re-evaluation and re-planning of pre-service training programs.

The fact that all of the teachers in this study have the Collegiate Certificate as a minimum is to be expected since all are graduates of four-year standard colleges or universities.

Forty-five teachers have completed professional improvement courses and have a mean average number of 14.5 semester hours. However, when the professional improvement of all eighty-seven teachers in this study is considered, the amount is very small inasmuch as forty-two teachers are without professional improvement courses. Attention is called to the fact that this may be due to forty-three teachers having only one to three years of teaching experience. A period of three years of teaching may reasonably be considered as a minimum opportunity for teachers to begin professional improvement.

The teachers with professional improvement have earned over three-fourths of their credits in Education courses. This may be due to the fact that 36.5 percent of the teachers were deficient in Education course credits whereas only 18.1 percent were deficient in technical agriculture course credits earned during their pre-service training period. The need for technical agriculture course work through professional improvement is apparent inasmuch as these teachers in addition to being deficient in technical agriculture course credits at the end of their pre-service training period, have earned a limited amount of credits in these courses since certification.

The difference noted in the amount of professional improvement obtained by teachers with one to four years of teaching experience and those with over four years of teaching experience is not marked. The less experienced teachers, mostly assistants, tend to receive comparatively as much professional improvement as the regular vocational agriculture teachers. It appears then that assistant teachers, while gaining experience under the regular teachers, tend to prepare themselves professionally. It may be assumed that the desire for professional advancement on the part of such teachers is a motivating influence.

The number of children appears not to limit the amount of professional improvement obtained by the teachers. Attention is called to the following possible influencing factors which may place some limitations upon this interpretation: (1) age of children at the time of obtaining professional improvement; (2) source of income in addition to regular salary; and (3) the necessity of renewing teaching certificates in accordance with state regulations.

Teachers take advantage of those means of obtaining professional improvement which result in the least interference with their duties as teachers. "Short-unit courses," followed by a combination of "summer session" and "short-unit courses," are the most frequent methods used.

The factor, "Distance to the institutions offering professional improvement," was named by the teachers as the most serious limitation to obtaining professional improvement. In view of this, the Teacher-Training Departments should consider the possibilities of improving the professional improvement opportunities for teachers by offering professional improvement courses in areas away from the college campus and organizing study and discussion groups that will contribute to the professional growth of teachers.

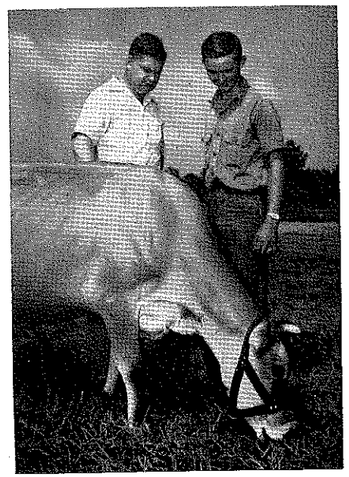
Whether or not the increase in salaries has been commensurate with the improvement in preparation and in-service training of these teachers is not confirmed in this study, because no common unit of measure has been applied to the many changes that have occurred. Increased salaries and increased preparation and professional improvement probably have influenced each other, higher salaries tending to encourage teachers to acquire better preparation and professional improvement, and better preparation and professional improvement tending to justify the payment of higher salaries. However, the increase in salaries attributed to professional improvement, as revealed by this study, is not great considering the tendency in recent years for teachers' salaries to increase somewhat regardless of professional improvement.

The large number of teachers who are active participants in professional organizations and the fact that a relatively large number hold positions of leadership, may be considered as an indication that these teachers are interested in and have a sense of responsibility for educational developments through organizational activity.

Although this study was not concerned directly with the following observations, the data of the study do tend to support them:

1. One criterion which appears to be used in the selection of regular vocational agriculture teachers (head teachers) is the number of years of teaching experience.
2. Teachers utilize the opportunities provided by teacher-training institutions nearest them in the pursuit of professional improvement.
3. More teachers are actively engaged in the work of professional organizations associated with their field of work than are in other professional organizations.
4. There has been a tendency for teachers' salaries to increase regardless of the amount of professional improvement obtained. □

A learning situation, a learner and teacher. Photo, courtesy of R. H. Tolbert.



The comparison of leaders and non-leaders in three rural Minnesota high schools

EDWARD W. HASSINGER and A. NEIL PEARSON*

THE purpose of this study is to determine some of the factors that may be associated with leadership in rural high schools. It must be emphasized that this is a preliminary study and that definitive results are not to be expected. The objective is to gain some insight into the problem of leadership in small high schools in order that fruitful hypotheses may be formulated.

High schools in three neighboring small towns in southwestern Minnesota were selected for study. These towns were farm trade centers in an area of high agricultural productivity and good communication facilities. In the spring of 1951, 283 schedules were obtained from the students in grades nine through 12. In School A, 70 students were interviewed; School B, 86 students; and School C, 127 students. For this study leaders were defined as those students who received five or more choices in response to the question, (a) which boy in your high school do you consider the outstanding leader; and (b) which girl in your high school do you consider the outstanding leader.

Comparisons Made

In analyzing the data, an attempt was made to indicate how leaders compared with other members of the group who were termed non-leaders. The non-leaders included the great bulk of the students in each school. In School A, the smallest of the three, five leaders were identified, two boys and three girls. Table I shows that one of the boys was an overwhelming favorite receiving 58 choices, while the other boy was selected by only five people. Among the girls the choices were rather evenly distributed, being 14, 16 and 17 for the three selected. There were seven leaders chosen in School B, two boys and five girls. Again in School B, one boy received an overwhelming number of choices, 59, while the other boy received six. Among the girls, the one named most frequently received 21 choices, followed by those named by 15, 10, 7, and 6 different students. In School C, the largest of the three, the choices between boys and girls were more evenly distributed. Thirteen individuals were chosen as leaders, 6 boys and 7 girls.

Fewer boys were chosen as leaders with apparently more consensus of opinion as to which boys were leaders. This is strikingly true in Schools A and B but not so apparent in the third school. The choices among the girls seem to be more evenly distributed and in general more girls than boys were chosen. This leads to the hypothesis that attributes of leadership appear to be more clearly defined and generally accepted when selecting boy leaders than when selecting girl leaders. From Table I, it is noted that 19 of the 25 leaders were from the twelfth grade, three from the eleventh, two from the tenth, and one from the ninth. With only one exception, leaders in Schools A and B were selected from the twelfth grade while in School C five of the 13 leaders were not seniors. One reason for this may be that School C is the largest of the three schools. In a smaller school, the students may act as a unified group looking to the older and more experienced members for leadership while in the larger school the student body may be split into a number of subgroups with grade level as one of the bases of separation.

*Edward Hassinger is a research assistant in Rural Sociology, and A. Neil Pearson is a research assistant in Agricultural Education at the University of Minnesota.

Table I. The Number of Choices and Grade in School of Each of the Twenty-five Student Leaders in Three Minnesota High Schools

	School A		School B		School C	
	No. of choices received	*Grade in school*	*No. of choices received*	*Grade in school*	*No. of choices received*	*Grade in school*
Boys:	58	12	59	12	41	11
	5	12	6	12	13	12
					12	12
					8	9
					7	10
					5	12
Girls:	17	12	21	12	27	12
	16	12	15	12	12	10
	14	12	10	12	11	12
			7	12	9	12
			6	11	8	11
					6	12
					5	12

Associated Factors

An attempt was made to determine whether nationality and religion were associated with leadership. From our observation no definite relationship was apparent. A number of religious and nationality groups were represented among the leaders in each of the three towns.

Students from both farms and small towns were represented in this study. The comparison of the residence of leaders and non-leaders is summarized in Table II. Male students come from the farm and town in about equal numbers, whether they are leaders or non-leaders. Among the girls, however, a larger proportion of non-leaders come from the farm, while a larger proportion of the leaders live in town. Therefore, the hypotheses may be formulated that among boys, place of residence appears to have no bearing upon their status as leaders; however, among girls, town residence appears to be a definite influence since a smaller proportion of the total number of girls produces a larger proportion of those girls recognized as leaders.

Table II. Residence, Leaders and Non-Leaders in Three Minnesota High Schools

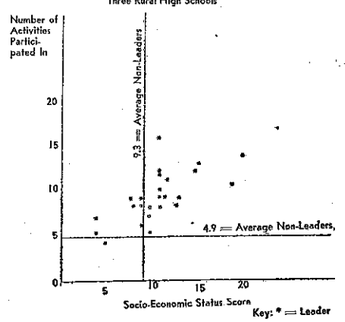
	Non-Leaders		Leaders	
Residence	*Number*	*Per Cent*	*Number*	*Per Cent*
Boys:				
Farm	63	50.4	5	50.0
Town	62	49.6	5	50.0
Total	125	100.0	10	100.0
Girls:				
Farm	75	57.3	5	33.0
Town	56	42.7	10	67.0
Total	131	100.0	15	100.0

Participation and Status

Social participation and socio-economic status were the next factors considered. Participation was defined as the number of high school activities in which the student took part and socio-economic status was measured by the Harrison Gough scale.* Figure 1 was constructed on the basis of these two scores. The horizontal axis represents socio-economic status and the vertical axis represents participation. The aver-

(Continued on Page 259)

Figure 1. Position of Leaders in Relation to the Average Value of Participation and Socio-Economic Status Scores of Non-Leaders in Three Rural High Schools



*Harrison Gough, "A Short Social Status Inventory," *The Journal of Educational Psychology*, Vol. 40, No. 1, pp. 52-56.

We need to give attention to evaluation of our - -

Opportunities for expansion in vocational agriculture

DUANE W. SANDAGE, Vo-Ag Instructor, Iowa Falls, Iowa

OPPORTUNITIES for expansion in vocational agriculture in the United States are unlimited. One needs only to attend a national NVATA Convention to recognize this fact. Vocational education is just in its infancy. More schools will be providing this type of training in the future. Departments already established will be expanded and improved.

Four directions which I believe provide much opportunity for expansion are:

(1) Multiple teacher departments
(2) Added facilities
(3) Comprehensive programs conducted
(4) Available source material for instructors

Multiple Teacher Departments

We are seeing a steady growth in two and three men vocational agriculture departments. With school replanning taking place in some states, larger units are being developed. We can expect even more of an expansion, then, in this direction.

Multiple departments hold many advantages. Teacher tenure can be increased in this manner. If an instructor can devote more of his time to the things he enjoys most, he is bound to be happier in the teaching field. Many new teachers have been confronted with presumably unsolved problems their first year. Having experienced teachers to work under has been of considerable value in helping to eliminate this situation.

Multiple teacher departments have reduced the teacher load in many cases. Certainly this is an advantage to the teacher and to the program. More office help is being made available in larger departments. Vocational agriculture teachers are getting away from having to devote time to secretarial work. These and many other problems are being solved by departments with more than one instructor. Opportunities for expansion in this field are evident.

Improved Facilities

Improvement in facilities will provide opportunities for better teaching programs in the future. Good facilities not only improve the quality of teaching but also add to the satisfaction of the job. The good work that is being done in vocational agriculture today leads us to believe that more communities will be willing to spend more money for adequate buildings and equipment in the future. How many new vocational agriculture buildings do you know about that have been constructed in the last three years? In our state there have been several. As long as we as vocational agriculture teachers do a creditable job in our communities, we will continue to see expansion in this area.

Comprehensive Programs

Better facilities and multiple ag. teacher departments will make it possible for more comprehensive programs to develop. The potential for expansion in this area differs with different communities. Many schools today are operating Chapter farms as a part of their educational activity. In our department we are conducting two subsidiary organizations that were established many years ago. One is the Iowa Falls Duroc Breeders' Association and the other is the Iowa Falls Crops and Soils Improvement Association. These FFA subsidiaries have proven invaluable to our community through the years. Other departments in other areas are expanding their programs to take care of the needs of the community.

Source Material for Teachers

Expansion in the above three areas will mean even more of a need for added available source material. Source material specialists are being used in many states at the present time to keep current materials in front of the vocational agriculture instructors. This is a time-saver for the instructor and improves the quality of teaching. More useful source material is being made available by commercial companies. Films and bulletins are being checked by Vo Ag teachers and suggestions are being made. In the future we will see more source material made available for classroom use.

It seems to me that the field of vocational agriculture is loaded with opportunities for expansion and improvement. It is up to us as teachers to develop these opportunities in our field. We must promote the development of multiple teacher departments, encourage the improvement of facilities and develop more comprehensive programs. Through the development of these opportunities we can find even a greater challenge in the teaching of vocational agriculture in the future. □

Comparison of Leaders—

(Continued from Page 258)

age scores of non-leaders for both socio-economic status and participation are indicated, and the scores of individual leaders are represented by asterisks. From Figure 1, it can be read that all except one of those chosen as leaders participated in more high school activities than the average of the non-leaders. The only individual who did not surpass the average for non-leaders fell just below. It may be noted also that he barely met the leadership criteria of five choices set up for this study. It appears that in these three schools leadership was associated with participation in school activities.

In considering socio-economic status, the picture is not quite as clear. In Figure 1 it can be seen that eight of the 25 leaders were below the average of the socio-economic status score of the non-leaders and that three more are just above the average. Therefore, it may be said that in the situations studied, the socio-economic status of leaders was not clearly different from that of the group since the leader's scores fall both above and below the mean of their schoolmates.

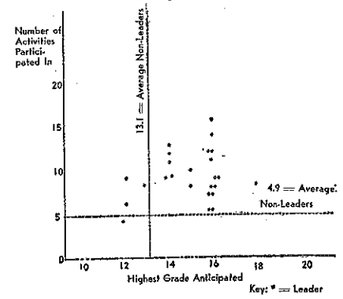
It is important to realize in this connection that participation was at least to some degree, within the control of the individual student, while socio-economic status as measured by this scale was fairly dependent upon family position. This indicates that there may be considerable latitude in the socio-economic strata from which these leaders were drawn. When participation of leaders is compared with the mean participation of the group from which they were selected the individual leaders consistently were above the mean of their group. This is not true for socio-economic status.

Relation to Educational Intention

In Figure 2 the participation coordinate (vertical axis) of our diagram is retained and the horizontal axis represents educational intention. Intention in school was obtained from the answer to the question, "How far do you intend to go in school?" The same type of analysis was performed with these data as with those for socio-economic status and participation. In highest grade anticipated four leaders fell below the average of non-leaders, two of these cases barely met the criteria of leadership. In general, it appears that anticipation of going on in school is a valid criterion of leadership. When taken together highest grade anticipated and participation in school activities reveal

(Continued on Page 260)

Figure 2. Position of Leaders in Relation to Average Value of Participation and Educational Anticipation Scores of Non-Leaders in Three Rural High Schools



The wife of a Vo-Ag teacher

Appraisal of the responsibilities, opportunities and the importance of the too-often overlooked partner in the life and work of the Vo-Ag instructor

BILL LONG, Journalism Major, California State Polytechnic College

"UNDERSTANDING and encouragement come even before love in achieving a successful partnership between an Ag teacher and his wife," says Mrs. Bertha Kipf, herself the wife of a three-decade Vo-Ag teacher, in a talk before a group of potential teachers and their help-mates at California State Polytechnic College, San Luis Obispo.

As an Ag teacher's wife, Mrs. Kipf remembers that she sometimes found herself doing numerous things she had never fully anticipated . . . acting as a substitute teacher, correcting exams, working to perfect a time schedule for a judging contest, issuing passes for an exposition or show. She recalls one wife who had an imminent, but not exact appointment with the stork. She found herself alone and in need of the doctor in the middle of the night with "dear husband" many miles away at the Great Western Livestock Show. Thanks to her composure of mind and good neighbors the trip to the hospital was accomplished in good order. Another Ag teacher, zealous in his work and loyal to its demands was marching in a parade when his little daughter first saw the light of day. The parade was to generate public support of an important school bond issue.

"Indeed," says Mrs. Kipf, "the Ag teacher's wife may find herself rushing some student and his project animal to the veterinary or challenging her imagination to design blankets and bonnets for would-be winners in the sheep division." Actually, it would be impossible to relate the many ways in which Mrs. Ag teacher fills in the little but important details of her joint career, she pointed out.

In sketching the so-called "Life of an Ag Teacher's Wife," Mrs. Kipf asked the potential wife to think of her opportunities and responsibilities in relation to community and school as well as her position as a wife.

"If the Ag teacher's position is in the city, large or small, personal contacts are less. If in a town or a rural area, personal contacts will be more numerous. Mrs. Ag Teacher may be expected to participate in local organizations; it will be important to know the different farm organizations and what functions they perform," she explained.

Mrs. Kipf believes the smaller community is best for enjoyable living. "It gives Mrs. Ag Teacher a chance to become personally acquainted with the Ag students, their hopes and ambitions as well as their troubles, which is one of the high-lights of being an Ag teacher's wife."

"All these various experiences we do not rate as burdensome. They are a part of the richness of human relations. The rewards begin to flow in on the night of a family pot-luck dinner when parents express with humble words how much their boys have been helped by the interest and encouragement of their teacher.

"The unusual effort that an Ag teacher puts into his work must be regarded as an investment in character and human welfare. Money alone cannot compensate for the long hours—there is no over-time pay, and too seldom any opening for promotion and too little recognition by the public. Would you ask 'How then is any interest returned on such an investment?' It must be gathered, sometimes in small amounts and sometimes larger."

"Everytime one of our former students comes to see us and relates his progress and activities, his failures and achievements, we comment, 'Well, we have had an interest payment today.' You see, we are dealing with intangible values, for 'man does not live by bread alone.'"

Commenting upon the personal roles and relationships between Mr. and Mrs. Ag Teacher, Mrs. Kipf continued, "let us consider the job that Mrs. Ag Teacher has contracted to fulfill. She has agreed to become a homemaker — a housekeeper may be hired on a time schedule — but not a homemaker. There is no other profession that requires such varied knowledge, information and experience as that of homemaking. The long, irregular hours and no overtime pay prevail here also."

"Possession of a college degree is not necessarily a 'must' for Mrs. Ag Teacher, however if she has farm background or knowledge of natural science it would be helpful in an understanding relationship. Her realization that Mr. Ag Teacher is working with wonderful material, with laws and principles established by the Creator of the Universe will help to give expression to her own ideals. You may teach your student the proper preparation of the soil for a seed bed and how to plant, but it depends upon the good earth, the sun and rain as to whether this effort is fruitful."

"You may work out a highly adequate feed ration for livestock, but were it not a law that the processes of digestion convert the material into growth and increase, your wonderful formula could go for naught. Working with natural things, as well as manmade, is one of the reasons why Ag teaching is such a significant profession . . . your opportunity to build into the lives of young people a love of natural things is unique."

"For each of you, then, Mr. and Mrs. Ag Teacher, understanding and encouragement come even before love in achieving a successful partnership. On her part, Mrs. Ag Teacher must feel that her husband's work is a rich experience, and contribute patience and understanding for the long hours, the extra hours, the inconvenient trips and all the discouraging aspects of the position."

"On his part, Mr. Ag Teacher can make a big contribution to the success of the partnership by expressing appreciation and making a consistent effort to keep his work in proper relation to his family life."

Summing it up, Mrs. Kipf said, "The capacity to view any situation from the other person's point of view as well as your own is most valuable, realizing also that understanding, encouragement and inspiration for and from each individual in this partnership is essential. When we each put into action the things that we know, the separate and combined careers of Mr. and Mrs. Ag Teacher can reach a new high." □

Comparison of Leaders—

(Continued from Page 259)

the advantageous position of leaders in that the leaders in both of these areas tended to be above the average of non-leaders.

Student leadership is extremely important in the social control of the school situation. Therefore, insofar as the factors found to be associated with leadership, as defined for purposes of this study, have some generality and validity, the knowledge is of practical value to the teacher. Keeping in mind the previous qualifications, the teacher in a small high school might expect the choices of leaders to be spread over a larger number of girls than boys with greater unanimity in the choice of boy leaders. Most of the leaders would be in the twelfth grade. The teacher might expect relatively more girl leaders to come from town than from the farm, while among boys residence does not seem as important. Leaders could be expected to be above the average of the remainder of the students in participation in high school activities and intention as regards further education, but probably could be expected to be both above average and below the average of the groups in socio-economic status. □

Have you seen the *themes* for Volume 27, listed in the April issue? Volume 27 begins with the July issue. Copy for a particular *theme* is due in the Editor's hands three months in advance of publication.

Send in pictures and explanatory legends for the *Stories in Pictures* page.

Vo-Ag has helped former students in non-farm occupations

Former students in North Carolina give credit to instruction in Vo-Ag for assistance in many occupations

ROY H. THOMAS, Supervisor, North Carolina

WE know that the teaching of vocational agriculture in the high schools of North Carolina is helpful to young men who enter the business of farming. But what about the young men who took the course in vocational agriculture and are now engaged in occupations other than farming? Is the teaching of vocational agriculture helpful to them in their present occupations? Well, a group, representing 90 different occupations, of former students of vocational agriculture who are now engaged in occupations other than farming are of the opinion that the course is helpful to them in their present occupations, according to a study made by Roy H. Thomas, Supervisor Agricultural Education Research, North Carolina State Department of Public Instruction.

As to the value of the helpfulness of the course in vocational agriculture to them 96 per cent of the 106 former farm boys studied stated that they would take the course in vocational agriculture if they should attend high school again.

Leadership Training

The former students ranked high the training they received in the Future Farmers of America which organization is an integral part of the course in vocational agriculture. Ninety-one per cent rated the training in leadership as being extremely beneficial. To help take part successfully in community affairs, 86 per cent found the training in conducting meetings helpful and the training in speaking in public was favored by 89 per cent.

Eighty-one per cent of the former students studied stated that the course in vocational agriculture as a whole was helpful and beneficial to them in their present occupations.

The former students put a high ranking on shop work and farm mechanics with 84 per cent listing them as being beneficial, 80 per cent indicated that the classroom and field work were helpful and the supervised farming program receiving a ranking of 70 per cent which was the lowest ranking on any phase of the program. Seventy-two per cent stated that participation in judging contests was helpful.

The study shows that 43 per cent of the former students who are now engaged in occupations other than farming attended college.

Many Remain in the State

Where do these former students who went into occupations other than farming now live? Of the 106 studied 45 now live in the communities in which they attended high school, 10 live in the county in which they attended high school, 38 live in North Carolina outside the community and county in which they attended high school and 13 live outside North Carolina.

As to the value of the course in vocational agriculture in his present occupation a rural minister writes: "I consider my four years of vocational agriculture invaluable. It gave me an appreciation of scientific farming."

A credit loan manager commented: "Can easily evaluate a farmer's financial condition after a few questions and thereby know how he can adapt his financial program with ours."

A service manager: "I have found that the knowledge I gained through courses has been invaluable to me in my work of servicing farm tractors and farm machinery and understanding customer needs."

Farm Machinery Dealer: "The course gave me good information on what the farmer will need in his farming operations and how to give him the implements he will need for a good farming program."

A pharmacist comments: "As a pharmacist, I am frequently consulted on problems of the farmer concerning livestock diseases and treatment, insecticides and general information. Vocational agriculture gave me a background for this type of work."

Occupations Vary

Following are the occupations represented in the study: Farm tractor dealer, Federal inspector, farm machinery dealer, manager cooperative fertilizer service, bank bookkeeper, radio repairman, general merchant, R. F. D. mail carrier, cabinet maker, automobile dealer, cashier of bank, grocer, hardware merchant, feed salesman, radio wiring, agent trainee U. S. Air Force, veterans instructor, highway patrolman, insurance salesman, bookkeeper in store, teacher vocational agriculture, sanitarian.

Optometrist, construction engineer, college student, wholesale flower grower, office staff, produce merchant, brick mason, electrician, dentist, hardware store manager, lumber clerk, city manager, manager grocery store, engineman, highway commission member, treasurer bus transportation company, loan manager, minister, assistant county agent, mechanic, produce salesman, railroad agent, bookkeeper in general merchandise store, postmaster.

Post office clerk, soil conservation service, physician, cafe operator, accountant, service manager electrical company, candy salesman, farm replacement interviewer, worker in pin factory, service station operator, technician Navy Medical Corps, recreation supervisor, salesman electrical appliances, tractor salesman, X-ray technician, salesman wholesale groceries, salesman book company, hosiery finisher, laboratory technician, automobile parts dealer.

Textile worker, tractor mechanic, airline radio operator, U. S. Army, classification work U. S. Marine Corps, electrical engineering, synthetic textile plant worker, superintendent cotton gin, hotel manager, air force radio repairman, hatchery manager, highway commissioner, attorney and carpenter.

Findings in Six Selected Departments

Forty-nine of each 100 white farm boys who studied agriculture in the high school for the years 1940 to 1950 are now engaged in farming, according to the study of 1208 farm boys in six high schools of North Carolina.

The study reveals that fifty-nine of each 100 Negro farm boys who studied agriculture during the ten year period are now farming.

According to the findings of the study nineteen of each 100 white students during the ten year period, are in occupations related to farming while only three of each 100 Negro boys went into occupations related to farming.

The study brings out that thirty-three of each 100 white farm boys who were enrolled in the agricultural courses for the ten year period attended evening or night classes after graduation.

The high schools included in the study were Epsom, Franklin County; Rowland, Robeson County; New Hope, Wayne County; Harmony, Iredell County and the following Negro high schools; Little River, Durham County and the Warren County Training School. □

Future Farmers of Canada

CREED

I BELIEVE IN THE FUTURE OF FARMING AND THAT LIFE ON A FARM IS BOTH HONORABLE AND SATISFYING.

I BELIEVE THAT SUCCESS IN FARMING COMES THROUGH A SCIENTIFIC ATTITUDE, EFFICIENCY, HARD WORK AND DETERMINATION.

I BELIEVE IN BEING A GOOD CITIZEN . . . HONEST AND FAIR IN ALL MY DEALINGS.

I BELIEVE IN ACCEPTING RESPONSIBILITIES AND DOING MY PART IN MY HOME, SCHOOL AND COMMUNITY.

I BELIEVE THAT SERVING MY COUNTRY, HELPING OTHERS, AND DOING MY BEST IN MY VOCATION WILL LEAD TO A HAPPIER, FULLER LIFE.

Selecting reading material for our students

How much attention do you give to your reading assignments? You will find here some helpful advice and suggestions.

HOWARD CHRISTENSEN, Vo-Ag Instructor, Bunkerville, Nevada

Howard Christensen

THE selection of textbooks and bulletins out of the mass of agricultural publications is a great problem to the vocational agriculture instructor. The teacher has the problem of matching the student with reading material he can understand. There is a wide range in the reading ability and interest of the pupils in the average class. This makes it necessary that a teacher have at hand a large library of readable material upon which he can draw. The good teacher minimizes the required reading for the class as a whole by using visual aids, actual observation and other procedures of good teaching. The teacher must depend upon written material as well as other aids as a means of good teaching.

How can a teacher select books and bulletins which will be suitable for students to read? To answer this question a study was made in which a list of 110 books was sent to the teacher trainers of the Pacific region for checking as to frequency of use. The books were ranked in their order of popularity. The 58 most commonly used books were analyzed by the application of the Flesch formula and ranked in order of difficulty. It was proved in this study that the frequency of use is not always a reliable guide to the readability of the books. For example, Keeping Livestock Healthy, a USDA yearbook was the second most commonly used book in animal production and Jull's Poultry Husbandry was fifth. Both of these books rated in or near the college level for readability.

Readability of Books

It was found that nearly 75% of the textbooks studied were suitable for grades 9 and 10 and nearly 95% are suitable for high school reading. Many sections of the books studied were college level reading and other sections were easy reading which would give an average reading difficulty suitable for high school. It is interesting to note that Morrison's Feeds and Feeding, abridged, was the most popular animal production book and Morrison's Feeds and Feeding, unabridged, was the third most popular book. Both were classified as suitable for 11th and 12th grades. The Morrison unabridged edition was easier reading than the abridged edition, however.

Bulletins More Readable

It was found that the bulletins published by the States were, on the whole, easier read than the USDA publications. Eighty-six per cent of the 110 State publications studied were suitable for 9th and 10th grade readers and 99% were suitable for high school. A comparison was made between the reading difficulty of the bulletins published by the Experiment Station as compared with those published by the Extension Service. It was found that the Extension Service bulletins were one-half grade easier.

This would indicate for most States that the important thing for the teacher to understand is the technicality of the subject matter of the bulletin. The style of the writer probably determines the reading difficulty of the bulletin rather than the service which published it.

Most of the USDA Farmers bulletins are suitable for the grades 11 and 12 while Leaflets and Miscellaneous publications were found to be suitable for most of the 9th and 10th grade readers. On the whole it was found that Technical bulletins and circulars are too difficult for high school students.

How to Select

How can the vocational agriculture teacher judge reading material? The teacher should examine the reading material he passes out to his students for difficulty. Practically all reading formulas agree on the point that the longer the sentences the harder the material is to read. This is the main reason many books were rated difficult. For example in Carroll and Rucker, "Pig Projects and Profits," many pages had short sentences that averaged about 20 words to the sentence; then there were pages where the sentences averaged from 60 to 100 words. As a result the book was recommended for the college level.

Another factor that makes reading difficult is the number of unfamiliar and long words. If a teacher must use reading material of this type he should make an added effort to interpret the reading material and explain the unfamiliar words.

It is apparent that the easiest way to "get by" and do the poorest possible job of teaching, is to pass out reading material at random with a set of questions which may or may not apply to the student's interest and the needs of the community. The teacher then expects students to spend one-half to three-fourths of their class time going over this material with a minimum of guidance and direction. A good teacher will try to minimize the amount of reading required and supplement it as far as possible with all types of visual aids, demonstrations and vitalized discussion.

I am not suggesting however that the reading in the class room should be eliminated entirely since that is probably the basic means of learning, but the selection of reading material and supervised study cannot be done blindly or without considerable thought. All the reading material should be carefully selected as to its style and method of writing. Long and involved sentences and description should be avoided if possible. Technical and unfamiliar words should be noted and those words which are necessary in teaching the point should be explained by the teacher. □

Roberts Elected Chairman of Sponsoring Committee

William A. Roberts

WILLIAM A. Roberts, president of Allis-Chalmers Manufacturing Company, Milwaukee, Wisconsin, has been named to serve as the 1954-55 chairman of the Sponsoring Committee for the Future Farmers of America Foundation, Inc.

The Sponsoring Committee is composed of donors to the Foundation. Its primary purpose is to solicit contributions from business and industrial firms, organizations, and individuals to provide funds used by the Foundation in its award program for outstanding Future Farmers of America and New Farmers of America members.

Mr. Roberts succeeds Chester H. Lang, vice president of the General Electric Company, Schenectady, New York. Under Mr. Lang's leadership last year sufficient funds were obtained to permit the Foundation to operate on a budget of $151,560 for 1954. Of that amount, $7,000 is scheduled for administrative expenses, $131,550 for FFA awards, and $13,010 for NFA awards.

Mr. Roberts was raised on a Missouri farm, and got his start with Allis-Chalmers in 1924 as a tractor salesman in their Wichita, Kansas, branch. He was named executive vice president in charge of the company's Tractor Division in 1947, and was promoted to president in January, 1951.

Long a friend of rural youth, Mr. Roberts also is a member of the National Committee on Boys and Girls Club Work, Inc. He is a former president and member of the executive committee of the Farm Equipment Institute, an officer of the American Road Builders Association and the National Safety Council, board member of the National Industrial Conference Board, and chairman of the Wisconsin Turnpike Commission.

VEGETABLE AND FLOWER SEED PRODUCTION by Hawthorn and Pollard, 1st edition, pp. 626, illustrated, published by the Blakiston Company, Inc., New York.

This book was designed to serve as a college text book, and a guide and source of reference to professional groups interested in the growing of vegetable and flower seeds. There are four parts to the book. Part I deals with the general organization and history of the vegetable and flower seed industry. Parts II and III deal with the methods of growing vegetable and flower seeds. Part IV deals with the handling of matured seed.

Leslie R. Hawthorn is a Horticulturist in the United States Department of Agriculture. Leonard H. Pollard is Professor and Head, Department of Horticulture, Utah State Agricultural College. —A.H.K.

FARM MANAGEMENT ANALYSIS by Bradford and Johnson, 1st edition, pp. 438 published by John Wiley and Sons, Inc., New York. Price $5.75.

Farm Management Analysis is a technical publication intended for use in teaching farm management at the college level. The first three chapters are used to define the subject; the fourth, to introduce farm management terms; and the remaining chapters to present and discuss problems of organizing and operating farms. Sample chapter headings are: Management, Its Functions and Elementary Managerial Principles; The Parts of a Farm Business and Income Statements; Multiple Production Relationships in Farming; Cost of Production Concepts and Farm Management; Input-Output Relationships in Pork Production (also for Dairy and Beef); Prices for Use in Budgeting.

Lawrence A. Bradford is currently Professor of Farm Management at the University of Kentucky. Glenn L. Johnson is Professor of Agricultural Economics at Michigan State College.

—A.H.K.

SUCCESSFUL DAIRYING by C. B. Knodt, 1st edition, pp. 381, illustrated, published by McGraw-Hill Book Company, New York. Price $5.50.

Successful Dairying is another title in the McGraw-Hill "Rural Activities Series." The chapters included in the book are as follows: Getting Started in Dairying, Selecting Dairy Cattle, Raising Dairy Calves, Raising and Managing Dairy Heifers, Raising and Managing the Herd Sire, Providing Feed for Dairy Cows, Providing Housing for Dairy Cattle, Managing the Dairy Herd, Keeping Dairy Cattle Healthy, Producing High-Quality Milk and Cream, Marketing Dairy Products and Cattle, and Handling Dairy Products in the Farm Household. The appendix contains a list of related readings and a correlated list of visual aids.

This appears to be a publication which will please teachers of vocational agriculture who are looking for a dairy enterprise reference book. The author took a long step toward organizing the book in terms of the operations farmers perform in producing dairy products—and, as a result, the organization of the book should lend itself well to classroom instruction. The treatment of the various topics appears to be fairly complete. The book is well illustrated (including eight color plates) with pictures, diagrams, and building plans. The illustrations appear to be purposeful and well selected. The emphasis in the writing of this book follows the same practical approach as some of the other "Rural Activities" series.

The author is Professor of Dairy Husbandry on the staffs of the Pennsylvania State College and the Pennsylvania Agricultural Experiment Station in charge of the research in the nutrition, feeding, and management of dairy cattle. He also teaches courses in the Dairy Department. He was born and raised on a dairy farm, and has been on the agricultural staffs of University of Minnesota, Cornell University, and the University of Connecticut. —A.H.K.

APPROVED PRACTICES IN SHEEP PRODUCTION by E. M. Juergenson, pp. 306, illustrated, published by The Interstate, Danville, Illinois. List price, $1.85.

The following chapters are contained in this publication: Opportunities in the Sheep Industry; Selecting the Breeding Stock; Breeding and Improving Sheep; Handling Sheep and Lambs; Raising Lambs; Feeding and Fattening Sheep; Shelter and Equipment for Sheep; Controlling Parasites and Diseases; Butchering Lamb and Mutton on the Farm; Selecting and Using Lamb and Mutton; Marketing Mutton, Lamb and Wool; Records for the Sheep Business; Producing Lamb for the Home Locker and Essential Skills for the Sheep Man.

This is a highly condensed account of the many problems and practices connected with the sheep enterprise. Much of the information was taken from state agricultural college, experiment station, and U.S.D.A. publications. The references to these publications will be of help to vo-ag teachers in locating additional literature on the various phases of the sheep enterprise. The discussion in this book varies from the specific to the quite general depending upon the particular topic. The appendix includes a chapter by chapter summary of approved practices and a glossary of terms commonly used in connection with the sheep enterprise. The book is spiral bound and contains 139 illustrations.

The author, Elwood M. Juergenson, is on the staff of the University of California, Davis, California. He is the co-author of *Teaching Tricks*.—A.H.K.

SALOME GOES TO THE FAIR by Paul Witty and Anne Coomer, 1st edition, pp. 160, illustrated, published by E. P. Dutton and Company, Inc., New York. Price, $2.50.

Salome Goes to the Fair is a novel about a 4H boy and his first experience in raising a gilt from the time of purchase at an auction to showing at the county fair. The story is of the inspirational kind, combined with enough practical information about raising swine to arouse the reader's interest in further study about the subject.

—A.H.K.

TEACHING VOCATIONAL AGRICULTURE by E. W. Garris, 1st edition, illustrated, pp. 393, published by McGraw-Hill Book Company, Inc., New York. Price, $6.50.

This particular addition to the McGraw-Hill Rural Activities Series has been anticipated for some time. The book covers a broad range of topics of interest to teachers of vocational agriculture, teacher trainers, and supervisors. Included are chapters on the development of agricultural education and of vocational education, the duties and responsibilities of teachers, buildings, equipment and supplies, the agricultural library, the school farm or outdoor laboratory, making and using surveys, organizing the course of study, preparing schedules and enrolling day students, teaching plans and procedures, using visual aids, supervising the farming programs of day students, teaching young and adult farmers, handling youth organizations in vocational agriculture, keeping records and making reports, planning summer work and professional improvement, providing school-community services, public relations, and evaluating the vocational agriculture program.

The book is illustrated with a great variety of photographs from many states. The content has been briefed down to a considerable extent, much of the content being presented in outline form. A list of selected references is provided at the end of most of the chapters. The appendix includes the vocational acts, lists of equipment and supplies for the vocational agriculture department, a filing system for teachers of vocational agriculture, and a correlated list of visual aids.

E. W. Garris holds B.S. and D.Sc. degrees from Clemson College, an M.A. from the University of South Carolina, and a Ph.D. from George Peabody College. He has served at the University of Florida since 1927 and is at present Head of the Department of Agricultural Education there. —A.H.K.

Cover Picture

Jessie Lassiter, a student teacher in Agricultural Education at N. C. State College, interviews a farmer as part of his learning experience at the Coats High School, Harnett County, North Carolina. The farmer is Randall E. Turlington, member of his adult class. (Photo courtesy of J. K. Coggin.)

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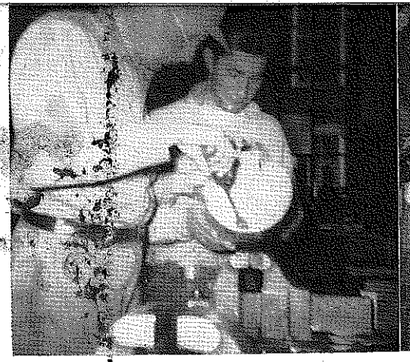
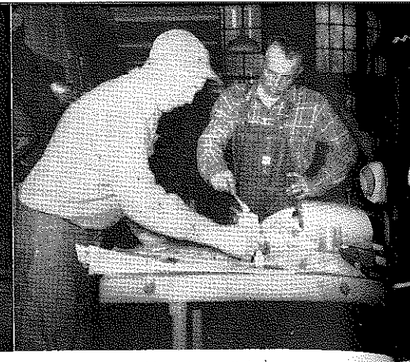
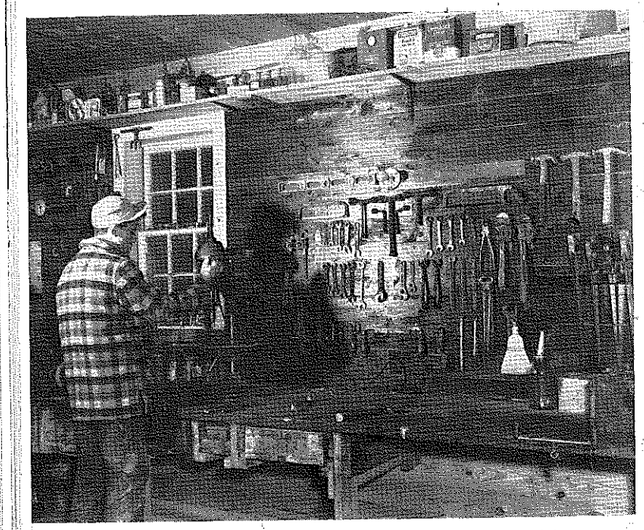
Stories In Pictures



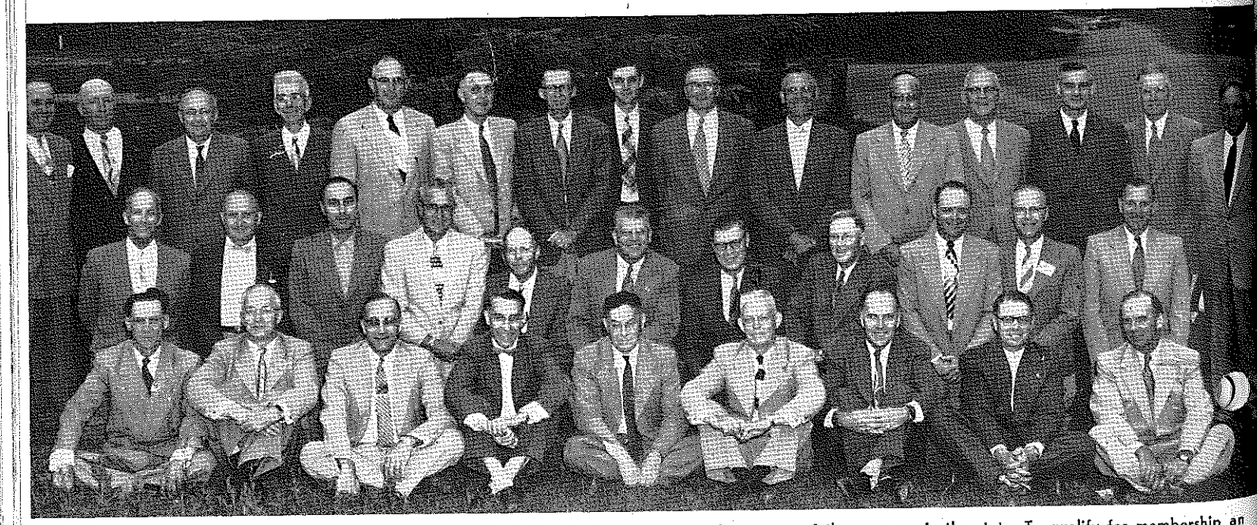


An annual feature of the Veterans Farm Training class at the Antigo Vocational School, Antigo, Wisconsin, is the short course in Farm Shop. This is conducted during the Christmas recess while the day classes are on vacation. The men shown in the pictures are part of the 55 veterans enrolled this year. They are removing rust from squares and soldering feed scoops. The 40 hours of shop work include, besides soldering, work in welding, tool fitting, woodwork and farm machinery. Instructors are Fred Whitemarsh, Walter Schultz, and Bernard Kjelstad. (Pictures by Bernard Kjelstad.)



A Young Farmer's home shop. Illustrated here are practices of shop organization and arrangement which were learned in shop classes. (Photo submitted by H. P. Sweany.)

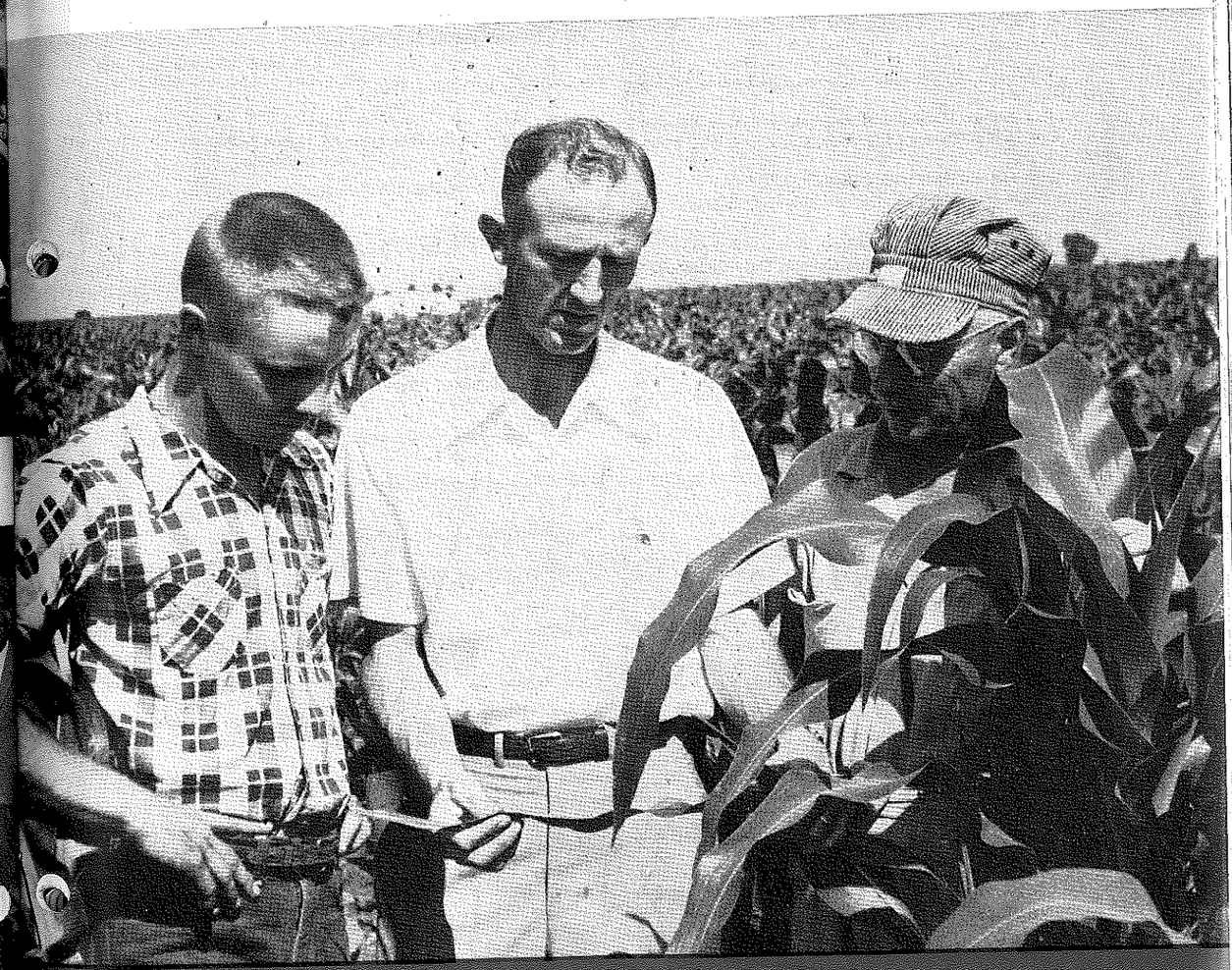
Members of the Past State FFA Officers Club of West Virginia and their families are shown on the camp grounds of the state-wide FFA-FHA Camp at their annual picnic held in 1952.



Members of the Wisconsin Agricultural Twenty Year Club held their Annual Meeting at Madison during the Summer Conference in June. After enjoying a delicious steak dinner at the Top Hat Restaurant, the group was addressed by Chief Louis Sasman, who commented on the effect of tenure in teaching upon the success of the program in the state. To qualify for membership an Agriculture instructor must have completed twenty successful years of service. There are now sixty members whose years of service total 1479 years. (Picture, courtesy of John Klipstein.)

Featuring

The Summer Program



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