Vol IX JULY, 1936 No. 1

Agricultural Education

The Department of Vocational Education at Waldo, Ohio, Meets the Community Needs (see page 11).

"Unless a man has to do more than he can do, he will not do all that he can do."—Boyden Sparkes

EDITORIAL COMMENT

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 the Meredith Publishing Company at Des Moines, Iowa.

Subscription price, $1 per year, payable at the office of the Meredith Publishing Company, Des Moines, Iowa. Foreign subscriptions, $1.25. Single copies, 10 cents. In submitting subscriptions, designate by appropriate symbols new subscribers, renewals, and changes in address. Contributions should be sent to the Special Editors or to the Editor. No advertising is accepted.

Entered as second-class matter, under Act of Congress, March 3, 1879, at the post office, Des Moines, Iowa.

THE PROFESSIONAL SECTION

A. W. Nolan

WITH this issue, Dr. A. W. Nolan retires from the editorial staff. We have appreciated his services and contributions to the magazine, and our readers will look forward to other articles from him.

As a new venture for the Professional Section we are using a committee plan for the development of this important section. After considerable study on the problem and a search for men to serve on this committee we have finally been able to obtain the services of two men who need no introduction to our readers. We are fortunate and happy to have Mr. A. K. Getman of New York and Mr. R. W. Gregory of Indiana take over the duties for this section of the magazine.

A. K. Getman

R. W. Gregory

NEW PROFESSIONAL SERIES

IN THIS issue of *Agricultural Education* we are beginning a new professional series of articles centering about the theme "Whither Agricultural Education?" with an appropriate subtitle for each issue thru May, 1937. The excellent response to the policy of bringing together the articles in the series, "Contributions of Ten Leading Americans to Education," in the form of a bulletin for use of teachers in preparation and in service, has prompted the editors of the magazine to hold the type for the present series and to reprint the eleven contributions in a bulletin available about July 1, 1937.

In planning the subtitles in this series we have given careful thought to the leading problems faced by teachers of vocational agriculture in the classroom, on the farms, and in extra class activities. Following is a list of the subtitles for the series:

In Relating Instruction to Life Needs
In Building Attitudes
In Building a School Program of Work
In the Curriculum
In Supervised Practice
In Developing Extra Class Activities
In Maintaining Balanced Education
In Co-operating With Farmers' Organizations
In Evaluating Pupil Growth
In Teacher Education
In the Art of Living

—A. K. G.
—R. W. G.

OUR CODE OF ETHICS

EVERY social group, however high or low, has its code of ethics. The youthful gang of the back alley has few rules of conduct, but it promptly pommels the lad who fails to abide by its simple code. The underworld may not reduce its code to writing, but "there is honor among thieves" and every gangster knows that violation of this honor means a bullet from an assassin's pistol. Every sport has its regulations for which the sportsman maintains a sacred respect. Every game has its rules, and the players are penalized for errors, blunders, and infractions. The lower the group, the fewer and less formal are the formulae of conduct but the more strictly are they enforced.

The older and more highly developed professions have well defined ethical codes, the observance of which is demanded not only by the members but by the society served by the profession. The public shuns the doctor who solicits patients or criticizes the services of a fellow physician. The dentist who advertises or goes out after business is called unethical. We go to the attorney's office to secure his services. "Pettifogger" and "shyster lawyer" are the epithets we hurl at the unethical practitioner.

The vocational agricultural teachers of Michigan have not applied for positions for the past sixteen years. Thus they have put an end to the practice of underbidding and undermining the members of their own profession. If each of our 222 vocational agricultural teachers applied for ten jobs, it would appear that there are 2,220 vocational agricultural teachers in Michigan. There are only 222. These 2,220 applications would lead superintendents and boards of education to believe there is a surplus of vocational agricultural teachers when there is really a shortage. This would tend to keep salaries down and put the teaching profession on the same plane as unskilled labor where a swarm of drifters and floaters are after every job. A "stack of applications for every position" does not promote the interests of the schools. Drifters and floaters may supply the labor market but they will not build a profession. Four years of college training should raise the profession to a plane where the job seeks the teacher.

This code is not enforced by legislative statutes but by the conscience of the members and the pressure of public opinion. The repute of a member of the group is directly proportional to his respect for and his obedience to the code. This has resulted in longer tenure, more real promotions, better salaries, higher esteem for the vocational agricultural teachers.—E. E. G.

HAVE YOU CHECKED ON YOUR SUBSCRIPTION?

MANY persons raise the question, "Why don't I receive the magazine?" It is often impossible to obtain certain back numbers of the magazine. The expiration date is given on the wrapper of your magazine. The mailing date is the fifth of each month. Look on the wrapper of this copy or your next one so as not to miss any issues.

Whither Agricultural Education In Relating Instruction to Life Needs?

DR. W. F. STEWART, Professor of Agricultural Education,
Ohio State University, Columbus

For a quarter of a century public funds and professional effort have been expended in developing an adequate program of instruction in vocational agriculture in the United States. It seems imperative now to ask the question, "Whither Agricultural Education?" with special reference to the major phases of service. The article appearing on this page is the first of a series of eleven contributions by leaders in agricultural education in answering this inquiry. The series will continue thru May, 1937.—A. K. G.

WHITHER agricultural education? Precisely this is a "to where" assignment, but we feel unable to indicate such direction or ends without taking our departure in the "from where" of the past, as we are thereby able to note in what direction agricultural education has moved—we hope progressed—during the years under federal and state aid. On this background the future is more reliably predictable.

Instruction in agricultural education must be defined before our study is begun. It could be defined by confining it to the planned instruction of classroom and laboratory for all-day vocational pupils in high school, young farmers, and adult farmers. More appropriately in this discussion it will be considered in its broadest scope and will include instruction in classroom, laboratory, and field; both class and individual instruction; instruction in school and at home; instruction of boys, young men, and adult farmers; instruction thru the activities of the organization of Future Farmers of America and thru extra-curricular events. In brief, it is a comprehensive interpretation of instruction including all agencies and methods used by workers in agricultural education.

What are the needs of life in agricultural vocations? Obviously, this is a question of philosophy. Several approaches to this query are possible. We use only our own. The needs of life are disclosed in one's concept of a "complete life," a "well-rounded life." Such a concept is particularly necessary to one who is attempting to educate students, for it is quite identical with one's concept of an ideal education. To this end we submit that a complete education rounds out life on several sides—health, vocational, social, civic, family relationships, avocational, ethical, religious, and perhaps others. Further, for each of these "sides of life" a concept of a complete education may be found in a contrast of one educated ideally with one who is sadly deficient in his education. To this end contrast the ideally educated farmer with one who is poorly educated. In the contrast are noted differences in abilities both managerial and manipulative, in skills, habits, interests, ideals, understandings, attitudes, and appreciations. Another way of stating these ends is that they constitute knowledge functioning in life. If this is true, if these are the fruits of a good education, it may be assumed that they constitute the needs of life. So, against this background, we shall examine the progress of agricultural education and attempt to point out its course—whither agricultural education in relating instruction to the needs of life?

As a clue to the objectives of agricultural education, the organization of subject matter is used, altho admittedly it is only approximate. By way of contrast, three organizations of subject matter are presented. The first is an index of instruction in agricultural education used nearly twenty years ago. It is from work submitted by one of our own classes in 1918.

Dr. W. F. Stewart

The Concept of an "Ideal" Education Provides for:

- The
  - HEALTH (Ditto Vocational)
  - VOCATIONAL:—
    - Ideals
    - Standards
    - Interests
    - Habits
    - Skills, Abilities
    - Understandings
    - Attitudes
    - Appreciations
  - Creative Judgment / Reasoning / Memory / Manipulative
- Pupil's Needs
  - SOCIAL (Ditto Vocational)
  - CIVIC (Ditto Vocational)
  - FAMILY LIFE (Ditto Vocational)
  - AVOCATIONAL (Ditto vocational)
  - MORAL-RELIGIOUS (Ditto Vocational)
  - ? ? ?

Dairy cattle—Breeds of dairy cattle: Holsteins, Jerseys, Guernseys, Ayrshires.

History of each breed; description; numbers; distribution; and records.

Dairy barn construction: Ventilation; lights; mangers; gutters; feed bins; feed alleys; stanchions; barn equipment, etc.

Even in 1918 agricultural education was supposed to meet the needs of life. The difference may be due to what were considered the needs of life. A more probable cause for such an abstract impersonal organization of subject matter is that our practices, if not our point of view, were greatly influenced at that time by the earlier concept of *imparting subject matter* rather than the *development of pupils* as the objective of teaching. A quotation from the classroom of the days when the "knowledge" philosophy prevailed facetiously pictures the situation:

> *E. Collings, "The Meaning and Function of Creative Supervision," Journal of Educational Methods, June, 1925.*
>
> "It [Education] considers the mind a grave yard, spacious and receptive. Data, events, knowledge of all kinds are so often dead matter ready for interment; the lesson, the burial rite, a tedious ordeal but very necessary in respectable places; the teacher the only live entity in the analysis, a combination of divine and undertaker; the examination, a sort of resurrection morning where, true to form, a few resurrect."

But, bad as this philosophy was, it had developed from something even worse as the following quotation from the German schools of a century ago reveals.

"Break your child's will, in order that it may not perish," wrote John Wesley. "Break its will as soon as it can speak plainly—or even before it can speak at all. It should be forced to do as it is told, even if you have to whip it ten times running. Break its will in order that its soul may live."—James' "Talks to Teachers," p. 182.

So, even the teaching implied by the subject matter organization of twenty years ago denotes some progress.

A survey of the teaching content of the last decade discloses in some quarters an extended use of job analysis and in others the use of the job-problem basis. An example of the former follows:

Enterprise—Corn Production
Jobs—1. Determining the field
2. Selecting seed
3. Drying and storing seed
4. Testing seed
5. Shelling and grading seed
6. Miscellaneous

The organization of subject matter around job analysis seemed to focus the teaching rather definitely upon farm needs on the assumption that the farm boy or the adult farmer needs to know

how the jobs of his home farm are done. It contributed to a liberal culling of "dead" content from a host of courses.

The second mentioned procedure included farm problems or decisions and is illustrated in the following organization:

Enterprise—Corn Production
Job 1. Selecting seed corn
Problems or decisions:
a. What is the best time to select seed corn?
b. How much seed corn shall be selected?
c. What method is most satisfactory?
Operative practices:
a. Selecting seed from the standing stalk.
Miscellaneous

This basis of organization featured the managerial aspect of the job with emphasis upon the thinking of the pupils as disclosed by their ability to make decisions in farm situations. On the assumption that failures in farming are due more frequently to inability to make life decisions than to lack of operative ability, the exponents of problem solving based their instruction quite entirely upon decision-making situations with manipulative abilities developed only in cases requiring a marked degree of skill.

WHEN we project job analysis and problem solving as bases of organizing subject matter against the background of the objectives already set forth, their deficiencies become especially noticeable and their errors apparent. The most condemning criticism of both procedures is that they get their substance from the analysis of farm enterprises and not from the analysis of those to be instructed. Therefore, they may be considered a hangover from the days of subject matter worshiping and are not best adapted to serving human needs. Jobs and problems come from the analysis of farm enterprises and farm situations, but when we analyze the needs of farm boys and of farmers we get ideals, interests, abilities, appreciations, attitudes, and such. And yet credit must be given to both of these practices for bringing the thinking of teachers to practical situations and, particularly in the case of farm problems and decisions, to situations demanding careful thinking. A full measure of credit must be given on both counts but so far as meeting the requirements of worthy vocational objectives they constitute cases of "sighting down the gun barrel the wrong way." To provide a complete education for pupils we must include more than jobs and problems.

Liberally interpreted this means, in addition to specific vocational needs, the inclusion in the instructional procedure of needs of a non-vocational nature to which a contribution can be made thru vocational instruction *more effectively* than thru any other agency of instruction. Briefly stated, some attention is to be given when solving vocational problems to the development of certain health, social, recreational, and civic needs, but only in so far as the contribution which vocational instruction can make will be more effectively and efficiently done than by any other instructional agency. Breadth of instruction is thereby provided, based upon judgment rather than license, and the needs of the broadly educated individual are recognized and in a limited way a contribution is made to them.

At this point it is interesting to get the point of view of current writers of recommended educational practice in the field of teaching objectives. Note the following quotations: (The italics are ours.)

Thorndike—"Educational Psychology," p. 1.
"Broadly speaking, education is the production of *useful changes* in human beings."

Lattig—"Practical Methods in Teaching Vocational Agriculture," p. 38.
"Every vocation of farming calls for certain *skills, knowledge of facts* and *principles, habits* of mind, and *points of view* necessary to efficiency and happiness on the part of the farmer. These may be said to indicate the particular objectives of the course of study."

Strayer and Norsworthy—"How to Teach," p. 234.
"Teaching is after all the adaptation of our methods to the normal development of boys and girls, and their education can be measured only in terms of the *changes* which we are able to bring about in *knowledge, skill, appreciation, reasoning* and the like."

Benson—"Psychology for Teachers," p. 251.
"The ultimate aim of education is to develop the *ability* to *think* clearly, logically, and constructively for the solution of definite problems, to marshal and organize past experiences, and to work in the search for truth with an open mind without prejudice, to the end that man may adjust himself to his environment and to his fellow men. Constructive thinking is the most effective means of reaching this goal."

Douglas—"Modern Methods in High School Teaching," p. 24.
". . . it is clear that *ideals, attitudes,* and *interests* are powerful influences and determinants of human and social progress and happiness, and that, once acquired, they continue to function long after the great bulk of information has sunk below the level of ready recall."

Thorndike and Gates—"Elementary Principles of Education," p. 167.
"To appraise the value of a subject, then, we must ask to what extent the outcomes of *information, skills, attitudes, appreciations,* and *ideals* actually acquired by the pupils contribute to the major aims of education."

Koos—"The American Secondary School," p. 375.
"According to Bobbitt, 'Education is preparation for life and life is a series of *activities*. Education, therefore is preparation for the performance of these activities. Let us discover what the activities are which make up man's life and we have the objectives of education.'"

How do the aims and objectives as set forth by these authors compare with our objectives as stated in earlier paragraphs, namely, developing in present and prospective farmers ideals, interests, habits, skills, abilities, understandings, attitudes, and appreciations, in vocational and other areas? A perusal of the quotations seems to show that each writer supports some of the objectives but not all of them. However, the objectives stated by all writers in the aggregate reach the equivalent of our objectives (see italicized words), and in one or two quotations they agree further by implying the development of these same aims in the other "sides of life," such as social, civic, health, and avocational. By such a test our statement of aims and objectives seems to be more comprehensive in any one field and broader in the number of sides of life conceived of as a necessary part of an ideal education than is stated by any of the writers quoted.

In addition to the somewhat formal instruction of the classroom already considered, the needs of vocational pupils are further met in the supervised farm practice programs carried on by individual boys on the home farms. These programs involve planning which provides opportunities for creative or original effort, likewise the managerial responsibilities of the farm programs and actual participation in the operative practices involved. From the outcome of the enterprises in the program most boys share in the profits so that experiences are met in thrift, in careful investment, and in long-time planning, all of which contribute to wholesome living thruout life. Class or community farm enterprises are likewise undertaken which feature co-operative effort, social and civic undertakings, and recreational ventures, so that, as Lapham states, "The farm boy who goes into a rural community understanding its need of social life, its need of wholesome uplift, its need of co-operation, not only in financial but in spiritual rehabilitation, has an entirely different outlook on life than the farmer whose one thought was to raise more corn to feed more hogs, to buy more land, to raise more corn to feed more hogs, and who, when the prices of things fell, had nothing wholesome to fall back upon and worthwhile to live for."—P. C. Lapham, "Vocational Education in Town and Rural High Schools." *Iowa Vocational Education Survey*, Vol. 13, No. V.

To this point we have considered "Whither Agricultural Education?" largely in the direction of vocational objectives. The program is much broader than that. Of the means which lend breadth to the education of farm boys, the organization, the Future Farmers of America, must be mentioned first. While it is admitted that the classroom instruction and the supervised farm practice programs of vocational students are quite definitely vocational in nature and farming proficiency is their goal, this is not the major objective of the Future Farmer organization and its program. In Geiger's score card,[1] developed for the evaluation of programs of work of Future Farmers of America, the following objectives are recognized: the provision (1) for vocational training in agriculture for the members; (2) for training in leadership for the members; (3) for training in thrift by the members; (4) for community service activities for the members; (5) for social and recreational activities for the members; (6) for training in co-operative activities for the members; (7) for encouraging scholarship among the members; (8) for training in character building and personality development of the members; (9) and for publicity and the promotion of vocational instruction by the members. From these criteria it is a ready inference that the F. F. A. program of work provides opportunities for meeting the needs of life in the area of social, recreational, health, civic, and ethical objectives and in the development of personality traits such as co-operation, leadership, and altruism, thus insuring thru the Future Farmer program breadth and depth to what might otherwise be criticized as narrow vocational instruction.

Referring to Lapham again (op. cit.), he says that the Future Farmer organization is probably doing the most effective piece of work known today in creating for farm youth a wholesome opportunity for self-expression, for the development of leadership, and for growth in wholesome attitudes which will stabilize the condition of American agriculture.

ANOTHER aspect of agricultural education is the contribution thru instruction for young farmers out-of-school and for adult farmers, which is carried on in groups of from fifteen to fifty who meet weekly usually thru the slack season of farm work to study pressing farm problems and develop needed manipulative skills. This contribution of agricultural education begun in 1918 was an active forerunner of adult education which has been advocated strongly in late years by many other educational agencies. With the group of young farmers the program of vocational instruction is also broadened to include numerous activities—social, recreational, and personality developing in nature, with some emphasis upon civic and moral issues. A more active desire to work together in the interests of a new agriculture is also developing in which co-operation and altruistic endeavor replace the narrower conception of self-sufficing farming.

This, then, constitutes the analysis of agricultural education to date, its development thru the past two decades. What is its direction at present? Whither will it go in the next decade? In repetition, it is stated that the answer to this question in any given state or in the nation as a whole rests first upon what the accepted philosophy of agricultural education is and second upon the ways and means of building educational practices on that philosophy.

Since there is ample evidence that instruction for life needs is beginning to be recognized—in theory perhaps more widely than in practice—a summary of the procedure to that end may be in order. Assuming that the community survey shows that the poultry enterprise, for example, is of such importance in a given community that vocationally trained boys and farmers who expect to live in that community should be changed by their education in the recognized human vocational values already set forth, the procedure might be somewhat as follows:

1. List the *managerial abilities* in poultry management which those enrolled need.

On this point Lancelot expresses our point of view exceptionally well. "It is then entirely proper that we should seek first to designate specifically the *interests, ideals, abilities,* and *appreciations* which should be developed in connection with a given course before undertaking to discriminate between its essential and non-essential subject matter."—"Handbook of Teaching Skills," p. 164.

2. Apply the techniques and procedures of good teaching which will develop each of these abilities.

Douglas—"Modern Methods in Teaching," p. 51.
"When reading material, written work, exercise, problems, compositions, observations, memorization, or practice is assigned, it is or should be with the thought that the activities of the student involved in the task assigned will result in or contribute toward the acquisition of *desired information, habits, skills, ideals,* and *interests.*"

3. List the *manipulative abilities* in poultry management which these individuals need.

4. Apply the techniques for developing these manipulative skills.

5. Likewise list in turn the desirable *ideals* in poultry management, desirable *interests,* needed *understandings, appreciations* and *attitudes* which are adjudged necessary in the lives of these boys and farmers.

Wilson, Kyte and Lull—"Modern Methods in Teaching," p. 67.
"It matters not how perfectly the desired results of education may be conceived nor how carefully the agencies for achieving them may be worked out in theory, the public schools will accomplish little of value unless what takes place in the classrooms operates with directness and economy to accomplish those results. It is in the classroom that socially serviceable learning occurs, with the results that pupils acquire *valuable* and *useful knowledge, functional habits,* and *desirable attitudes.*"

6. Apply the techniques found most helpful in developing these respective needs.

7. Include appropriately the effective development of other sides of life, as the situation allows.

Wilson, Kyte and Lull—"Modern Methods in Teaching." p. 14.
". . . what are the permanent possessions the children should acquire as a result of their school life? Evidently they should have such knowledge, such *habits* and *skills,* and such *attitudes* as will enable them to respond effectively to the demands of *health,* of *occupation,* of *pleasure,* of *citizenship.*"

Parenthetically it may be stated that the farm background and technical training of the teacher are the basis for his knowing these needed values, and it is the responsibility of the teacher-training department to devise a variety of techniques and procedures that will develop these values. Finally, it must be held a basic requirement of a teacher, if he is to attain these objectives, that he possesses that judgment which will enable him first to select the most important values to develop in the time available and then, in any given teaching situation, to select the techniques and procedures which will effectively achieve the desired objectives.

As this procedure is continually re-examined and re-defined the outcome will be, depending upon the reliability of the judgments involved, a more nearly exact discernment of the needs of life, a continuously refined and more efficient procedure in developing these values. There is evidence of progress towards these ends in many centers of instruction in agricultural education, but no one will admit that more than a beginning has been made. Marked improvement is possible as a next step in agricultural education. Where, then, will this improvement be made? Whither agricultural education? As presented the procedure is too subjective to be accepted as scientific, too dependent upon judgments which may be faulty. Agricultural education of the future must improve upon this technique. The way out is in the measurement of results by means of objective devices that will either remove or reduce the subjective element. To this end we submit two proposals: First, measurements should be devised to ascertain the relative importance of various objectives in terms of human values in order that those individual needs of greatest value may receive emphasis while those of lesser importance may be left to the method of self-education. Dr. Ralph W. Tyler of the Bureau of Educational Research at Ohio State University is now directing a study in which an attempt is being made to measure the objectives of Progressive Schools. In the second place, there is need for further development of measurements that will determine the proficiency that the individual achieves in striving for certain desired objectives. For example, the efficiency of the instruction to develop the ability to prepare an economical dairy ration or to sharpen a saw, would then be measured in terms of degree of attainment developed. These appear to be the directions of further improvement. With the ends of agricultural education objectively determined in terms of human needs and with the attainment of the most important of these ends improved to the highest degree, instruction in the field of agricultural education may then be considered on the high road to functioning content efficiently and effectively taught—the most urgent needs in the lives of the pupils developed by the most efficient teaching procedures.

1. L. N. Geiger. *An Evaluation of Programs of Work in Local Chapters of Future Farmers of America in Ohio.* Master's Thesis, Ohio State University, Columbus, Ohio, 1933.

Enthusiasm

G. E. NEWBURN, Rock Falls, Illinois

ENTHUSIASM is contagious. It is quite certain that a teacher losing his interest in his work cannot expect his students to maintain such interest in their projects and in their recitations that they will not require a great deal of urging to get their jobs done.

A teacher who has been on the job five years or more may find himself getting into a rut. To prevent this, he must be ever on the alert to get new ideas and different activities for his work. He should tackle new problems and seek new solutions for the old ones which have gone unsolved for a long time. We always get a new inspiration and a new vision for our work when we attend the summer conference, the American Vocational Association convention, or even our regional meetings for teachers of vocational agriculture. It seems that if we would make more frequent visits with other teachers in our work, we might be enabled to maintain our enthusiasm and thus give our boys a greater inspiration and a stronger incentive to do better work.

Turkey Project Aids Pupil to High School Education

Z. G. HUDGIN, Instructor in Vocational Agriculture, Billings, Montana

DONALD WARFIELD, a 16-year-old sophomore in Billings High School, completed his first year's project of vocational agriculture with a record of financial success that will be a goal toward which future students may strive. He is indeed "earning while learning," for the profits derived from his project are used to defray daily expenses of attending high school.

On entering the high school in the fall of 1933, this student formulated plans for a turkey project in the class in vocational agriculture. In the spring of 1934, he bought eight hens and a tom for the foundation stock. During the spring laying season, the hens produced 357 eggs which were set in an incubator. Two hundred and twenty-nine poults were hatched from these eggs. This is a hatching percentage of 64.1 percent.

These poults were placed with the turkey hens and were fed clabbered milk, eggs, chopped dandelions, and oatmeal. Young Warfield then added a commercial mash to the rations and supplemented the above with a scratch feed of sifted ground corn. After a short period of this ration he gradually changed to a mash of mixed feed and corn meal. The birds were also given oyster shell and milk until the first of August. During August and September they had to do without the milk but they were ranged in a near-by cornfield and its adjoining pasture, getting valuable grazing and having an abundance of grasshoppers. On October first, Donald had them on full feed with cracked corn as the major part of their diet.

Warfield produced 3,036 pounds of turkey in his first season. His sales amounted to $466.26; his feed and supply cost to $152.83; his labor to $151.00. He netted a profit of $126.43, and by taking the $151.00 for self-labor and add-

(Continued on page 13)

Methods

Observations of a Critic Teacher

G. A. SPIDEL, Teacher,
Waverly, Nebraska

G. A. Spidel

Editor's Note: Experienced teachers will find this a stimulating article to read, and it should serve in giving suggestions for self-improvement in one's teaching techniques.

LEADERS in the field of vocational agricultural education have always recognized that if the teachers in this field are to develop their programs adequately they must measure up to a high standard of inherent capacity and professional training. Much thought and labor have gone into the building of the present teacher-training plan, and it is kept constantly up to date by suggestions from and contact with experienced teachers on the job. Much of the teacher-training work is included in college courses, but one essential phase consists of a period of practice teaching.

Would you like to stand behind the scenes with the critic teacher to watch the attempts of would-be teachers of vocational agriculture in their practice teaching? Not long since, perhaps, you have stood in the shoes of the candidate, fearful of the mistakes you might make and of the criticisms you would receive. But now, as you watch other aspirants work, you note many of them making the same errors, altho each has his own personal ways of accomplishing them.

Students of teaching methods recognize well defined steps in the teaching process. A recent study has shown that too many teachers, following the line of least resistance, discard recommended methods, and it is not surprising, therefore, that approved methods impress the practice teacher with being a departure from the trend which he has observed in his years of school life.

The vocational or problem point of view influences every phase of the teacher's work and is felt in every step of the lesson development. By this it is meant that the subject matter should be selected and taught as if it were not merely incidental to a day's class work but as if it had an important bearing upon the practical decisions and jobs being carried out or recommended to be carried out in connection with the daily tasks on the farm in which the boy participates and is looking forward to a larger share as he approaches manhood. To teach in this way it is necessary to set up problems which the study material helps to solve. The discussion carries out the solving process. The technique involved in this type of teaching is not easy to acquire but it spells success for those who master it.

The preparation step, approach, or motivation, as it is variously called, constitutes the first hurdle of the practice teacher as he faces his class. How difficult it seems to gather together the loose ends of attention, to untangle the snarled threads of interest and point them toward the problem of the day. The problem should have inherent interest or it is not worth teaching. That interest, however, is not apparent to the boy who has just come to class perspiring and panting from his exertions on the playground, or has been musing over the plans for an impending class party. The teacher can look for little worth-while accomplishment on the part of the boys, however, unless they are inspired to effort thru the creation of interest. Initiative and resource are demanded if the teacher is to succeed in this task and often he stalls in the attempt. The difficulty of performing this step adequately is recognized by the practice teacher and was expressed in the rationalization of one who said recently, "Isn't it true that motivation is dying out?" For many no doubt it was never born, but when motivation dies, good teaching will be buried in the same grave.

THE assignment offers more difficulty to the teacher who uses a variety of study materials, bulletins, farm papers, and books than to an academic instructor who follows a measured progress thru a well-written text. The best assignment is a problem set-up. The study and discussion are a solving process. Unless the set-up is thoro and clear and in a form that can be referred to during the study time, the assignment is a poor one. A recent case is recalled in which a college senior made a short oral assignment briefly detailing points that would be encountered in the study material. No study guides or pivotal questions were emphasized or written on the blackboard, and the boys were provided with several bulletins to flounder thru as best they could. The failure was so flagrant that the critic teacher called the attention of the senior to it without waiting until the end of the period. The senior was inclined to defend his work. It was then suggested that the boys be asked to lay aside their study and write down the assignment as they understood it. The results were very convincing, and a marked improvement in his assignments was noted thereafter.

Few candidates are proficient in the art of questioning. College seniors almost universally overestimate the capacity of the high school boy and pitch their instruction upon too high a plane. Unconsciously they imitate the language and style of their college instructors and fail to get down to the high school level. Many questions are not clear; the student does not grasp what the teacher intended to express. Sensing this difficulty, the teacher lapses into the rut of doing the work himself, of answering his own questions or lecturing.

Among the errors in questioning common to practice teachers are the asking of obvious questions such as "Is sweet clover good for the soil?" Questions that can be answered with "yes" or "no" or with a single word place a premium on rote memory and seldom stimulate true thinking. Good questions are those which direct the minds of the boys in problem solving. Questions beginning with "what" or "when" are often of doubtful value. Those beginning with "how" are usually good ones, but many of the best ones begin with "why."

Other errors in conducting the class discussion consist in concentrating the fire of questions upon those who respond most readily, partially or entirely ignoring those who are less forward or who may give an unsatisfactory answer in their first attempt. The teacher should aim to stimulate in every mind the interest of the participant and to relegate no student to the position of spectator. Even wrong answers may help to round out the discussion by getting to the bottom of the error. Much of the teacher's responsibility lies in rooting out error as well as in planting truth. Often the inexperienced teacher leaves a conclusion "hanging in the air." This happens when a variety of answers have been received in response to his problem, leaving the observer (and the student) in doubt as to which solution is regarded as correct by the instructor.

Skill in questioning develops rapidly with experience if the teacher is alert to note the reaction of the student to type situations. Many seniors make much progress in this direction during their limited period of practice teaching. Others become aware of their weakness, at least, and thereby take the first step toward its correction.

Skillful teaching, by keeping boys busy with interesting work, eliminates many problems in discipline, yet such problems will always be found where boys are found, whether in vocational or academic classes. An experience of several years ago will serve to illustrate at least one of the factors involved in discipline. A practice teacher was assuming the entire responsibility of the class during a two-day absence of the critic teacher. He was apprehensive of the conduct to be expected from a sophomore group and determined to "clamp down" at the outset of the period, which, he had heard, is the proper procedure. With a stern countenance he informed the class that he would expect good behavior in spite of the absence of the regular teacher, thereby innocently divulging the fear that he was expecting trouble. To emphasize his remarks he threw back his coat lapel exposing a badge and announced that he was a deputy sheriff and that he would not "stand for any monkey business." It proved to be a long day for him, nevertheless, and the "thing he feared came upon him." When the critic teacher returned, the deputy sheriff had a "feeling of need" for suggestions for handling the many and varied situations with which he had found himself unable to cope in spite of his deputy sheriff's badge. This man had not learned, and many teachers are slow to learn, that a teacher cannot be endowed with authority from an external source but that authority and control must grow out of one's own inner resources.

Work with practice teachers is stimulating and challenging. It is encouraging to note the earnestness with which they approach their task and the eagerness shown for improvement. The term of practice teaching is very short, unfortunately, and great teachers can be developed only by a continuing interest in self-improvement and a professional pride in good teaching.

Integrating the High School Departments

J. R. HEWITT, Teacher,
Plainview, Texas

IT IS only natural and human that each teacher in the high school system believes that his is the best organized department and that his methods of teaching are superior to those of the other departments.

Little action has been taken, so far, to integrating, or synchronizing, the subject matter taught in the high school departments. It is the common practice for each teacher to make out his individual teaching plans with little thought of, or regard to, the plans or subject matter taught in the other departments, and, seemingly, totally unmindful that the time that a student spends in school is very limited. Such methods have caused us, as teachers, to either overemphasize certain factors in the pupil's education or to omit others and possibly more important ones entirely, thus producing an unbalanced program and consequently wasting much time and energy for all concerned.

Each child is an individual and has his own life to live. His time for preparation for life is short, at best, and the efficiency of his training, seemingly, could be greatly improved if the teaching plans of the entire high school curriculum could be formed as a unit. This synchronizing of the subjects taught in the high school would give the pupils a well balanced training program, as well as further advancement in every department with the same energy expended.

There are a number of ways of integrating our high school units. The writer suggests the following easily executed plan. Each teacher submits subject matter to the other departments in the high school system that they desire to be included in their teaching plans that would be of most benefit to his department and to the individuals of his class. Each department, after compiling the material referred to it from the other departments of that system, carefully weighs and balances this material and fits it into the teaching plans to the best advantage of the students. This may be accomplished by each teacher working separately or thru faculty conferences.

The vocational agricultural teachers of the South Plains of the Texas Panhandle are submitting to the different departments of their respective schools the following subject matter which they desire to be included in the programs of the following departments:

English: how to speak correctly, fluently, and convincingly; how to write a good business letter; how to write articles for papers and magazines; and how to properly write advertising matter.

Foreign Languages: determined by the individual needs of the pupils.

Mathematics: common and decimal fractions; weights and measures; interest and percentages; notes; commissions; taxes; insurance; public relationships (light, heat, water, etc.); household and personal accounts; keeping of records; area of rectangles, parallelograms, triangles, trapezoids; measuring land areas; areas of circles; measurement of volume; volume of cylinders and cones; content of right prisms; powers of roots; logarithms; antilogarithms; and extension of roots by means of logarithms.

Physics: principles and mechanics of household appliances—washing machines, electric irons, sweepers, radios, and refrigerators; electrical systems and appliances; water systems; ventilation systems; heating systems; waste systems; house construction; etc.

Chemistry: chemistry of foods, digestive systems; soils, plants; and sanitation.

Biology: usually the major part of the subject matter offered as determined by the individual needs of the pupils.

Economics: agricultural economics.

History: political history and that relating to agriculture.

Civics: American government emphasizing the agricultural adjustments.

Public Speaking and Debating: as much as the pupil can include in his program.

Typewriting and Shorthand: determined by the individual needs of the pupils.

These vocational agricultural teachers realize that much of this material is already included in some of the teaching plans and that parts of this subject matter suggested may be impracticable to use in the present regime, but a start has to be made somewhere and this contribution is offered in a friendly and co-operative spirit and in the hopes that we can help each other by exchanging ideas and eventually eliminate duplication of work and also fill in the gaps that we now have in the pupils' training program.

Laboratory Plot

L. L. PRICE, Adviser, Ida F. F. A. Chapter, Louisiana

WE HAVE planted a large quantity of peach seed. We contemplate budding these in the plot before transplanting them in our orchards. We are rooting a variety of shrubs for home beautification. We plan to have some beautiful shrubs in all the home yards in our community in a few years. All plants are to be furnished to the homes free of charge. We work in the school plot at times when we have caught up with our other work.

Within a short time we will start work on our hotbeds for such early plants as tomatoes and peppers. These plants cannot be produced in the open like cabbage and onions.

Dairy Herd Improvement Associations

W. D. FREITAG, Teacher,
Wisconsin

THE importance of dairying has led Wisconsin teachers of agriculture to develop dairy herd improvement work as one of the major types of supervised practice. Dairy herd testing has developed into one of the most interesting and popular projects due to its practical application on the home farms of the boys.

The results of a recent survey revealed that in 122 departments there are approximately 1,680 herds including 24,955 dairy cows tested each month. An annual average butterfat production of 253 pounds per cow was reported, which shows marked progress when compared to 216 pounds annual production per cow for all dairy cows in the state. The higher annual average of production has no doubt been largely obtained thru the use of test records, as evidenced by the fact that during the past year over 1,000 unprofitable producing individuals have been culled out of the herds.

Several departments have availed themselves of the opportunity of working in co-operation with the Wisconsin Dairyman's Association and the state office of farm and dairy records, which recognize the testing records of vocational agricultural students on the home herds. Eighteen departments are sending regular monthly reports and summaries on 297 herds to the state office. Twenty-six departments are using the regular, permanent loose-leaf herd books in 283 herds, and the regular dairy herd improvement association ear tags are used as a means of identification by 17 departments in 234 herds.

Providing efficient testing equipment has been recognized as one of the means of maintaining interest in the work. Forty percent of the Wisconsin departments have been equipped with electric testers. As a stimulus, several schools have awarded certificates of attainment or achievement to boys completing one, two, three, or four years of continuous testing.

The teaching of practical business methods has been included in the work. Twenty-three departments reported that they had an official organization with officers, manager, and a constitution and bylaws governing the activities of the local association. Financing, always a problem with extra activities, has been solved in numerous ways. It was found that in many cases no charges were made, the materials being furnished by the school. In some associations a flat rate per herd or cow per year was used ranging from $.75 to $1 per herd and five to ten cents per cow. The most universal charge made, where fees were collected, was from half to two cents per cow tested each month.

The following recommendations were drawn up as a result of the teacher discussions for the purpose of carrying out an efficient testing program.

1. It has been the general consensus of opinion of the group that testing work begin with the freshmen. The recommendation of the committee is that testing of the home herds be started with freshmen and carried thru the four years, with an ultimate aim of having the boy

(Continued on page 16)

Supervised Practice

Common Weaknesses in Supervised Farm Practice

DON M. ORR, Teacher Trainer,
Stillwater, Oklahoma

A CONFESSION is good for the soul. The following confession might be a very admirable thing for many other state groups of teachers of agriculture. How about supervised farm practice in your state?—E. C. M.

Don M. Orr

Recently three groups of teachers of vocational agriculture in Oklahoma met as conference groups and discussed the following questions: (1) What are the common important weaknesses in our supervised farm practice work? (2) Why do these weaknesses exist in our supervised farm practice work? and (3) What can we as teachers of vocational agriculture do to overcome these weaknesses?

The points listed below were contributed by the teachers who sat in the three conferences mentioned above:

I. What are the common important weaknesses in our supervised farm practice work?

1. Inaccurate records.
2. Inaccurate summaries.
3. Records are not summarized, analyzed, and interpreted
4. Poorly selected projects and other supervised practice activities.
5. Projects are limited in size and scope.
6. Pupils do not have ownership of projects.
7. Pupils do not have management of projects and other supervised practice activities.
8. Pupils do not have specific purposes or objectives in mind.
9. Pupils have poor business arrangements.
10. Pupils are not really interested in supervised farm practice activities.
11. Supervised practice plans are general, vague, and incomplete.
12. Projects are not taken seriously by the pupils.
13. No long-time plan for farmer training.
14. Supervised practice activities do not lead to the pupils' establishment in farming.
15. Limited application of supervised practice experience to planning other farm work.
16. Supervised practice other than projects is not correlated with problems considered in class.
17. Supervised practice activities other than projects are too often a list of odd jobs.

II. Why do these weaknesses exist in our supervised farm practice work?

1. The teacher does not devote enough class time to the various problems involved in organizing and planning supervised practice activities.
2. The teacher includes too many problems in his calendar of work for the year.
3. The teacher gets too busy teaching a course in agriculture to consider individual programs of training for proficiency in farming.
4. Parents often have an unfavorable attitude toward the supervised work.
5. Parents do not understand the nature and purpose of the supervised farm practice work.
6. In some areas the farms are small, poorly equipped, and give a low income.
7. Parents do not have confidence in the teacher.
8. Parents do not have confidence in the pupils.
9. The pupils are not able to separate their enterprises from other enterprises on the farm.
10. The teacher does not visit the pupils often enough.
11 The teacher does not have a definite plan of what to do and what to say when he visits a pupil.
12 The teacher has too many responsibilities to devote the necessary time to project visits.
13. Many of the pupils are too young to select large projects or to plan a program of training.
14. Many of the pupils live on rented farms and move every year or two.
15. The teacher does not have a method of motivating pupils in supervised practice work.
16. We have no standards for supervised farm practice work.

III. What can we as teachers of vocational agriculture do to overcome these weaknesses?

1. Devote more class time to the selection, study, planning, record keeping, summarizing, and analyzing of supervised farm practice activities.
2. Get better acquainted with the parents.
3. Acquaint the parents with the nature and purpose of supervised farm practice work in vocational agriculture.
4. Visit boys oftener, with a definite purpose to be accomplished at each visit.
5. Let pupils and parents know that the teacher is to visit them at a specified time.
6. Become thoroly acquainted with the home situation of each of his pupils.
7. Have a definite system and a definite time for pupils to bring in information on supervised practice work which should be entered in the supervised practice book.
8. Do professional improvement work for the purpose of learning improved methods in supervised farm practice work.

The majority of teachers present in each conference group apparently thought that the most important things that they could do to improve their work during the year were to devote more class time to supervised farm practice work and to acquaint the parents with the nature and purpose of supervised farm practice work.

Community Improvement Thru Project Work

LYNN HEATLEY, Teacher of Agriculture,
Midland, Michigan

OUR supervised home projects in vocational agriculture are planned to meet the needs of individual students. In order to do this we endeavor to direct boys into projects which are best suited to their conditions. Soil, climate, market, and the aptitudes and interests of the boys determine the type of project.

Midland County has a wide variation of soils ranging from sand to heavy clay. One section of the county has a large acreage of dark sandy loam. We have found it is well fitted for growing early seed potatoes. Students from this area for the past several years have grown certified Irish Cobbler seed potatoes. Through their efforts, good seed and improved methods of potato culture have been introduced into many communities. One boy, during his high school course, made a net income of $1200 from his seed potato projects and is now well established as a potato grower. Others have realized lesser amounts, but have carried out creditable projects. However, the financial returns are not the only results gained from these potato projects. Knowledge and experience in potato culture, and community improvement are equally important results. As an outgrowth of the efforts of these boys this section of the state is noted for its Irish Cobbler seed. Each year orders have been received for seed potatoes from other states as well as many sections of our own state.

In some sections of the county farmers are not growing the best adapted varieties of grain. Through project work better adapted varieties and improved strains have been introduced by pupils. Both from the state experiment station, with which we work very closely, and our own work we have found what varieties of grains are adapted to our conditions. Similar work has been done in standardizing varieties of smaller grains.

Our county is not a section of large poultry farms. However, the farm flock is on every farm. During the early years of our poultry projects we sent to the Ontario Agricultural College for Barred Plymouth Rock setting eggs. This strain is now the foundation of many flocks in the county and their strong breeding characteristics are readily recognized.

As we drive through the county we can recognize a large acreage of potatoes, corn, small grains, and many flocks of poultry which are the direct results of boys' efforts in their project work. In educating themselves they are building up the community in which they live. One boy, in the story of his poultry project, expresses himself in this way: "I am glad that I had the opportunity to attend high school and study better methods in agriculture and take them back to the community which sent me to school."

Project Record Cabinets

Note: We would like to give credit to the author of this article. It was received by one of the special editors with no name attached. We have held it for a long time in the hope that the author might possibly write and scold us for not publishing it, but even he must have forgotten about it.—The Editor.

SOME foods warmed over taste better than when first cooked. The first cooking of the meat for this story was long ago. I obtained the idea from some source long since lost; it possibly might have come from our own Agricultural Education Magazine, supplied by a present reader.

Students with record cabinets

At any rate the idea of a project record cabinet appealed to me, and I decided to try it out. Since all boys have records to keep, the building of the cabinets provided shop work for all. Each boy drew up the plan for his cabinet and made a list of materials needed. There were as many styles as there were boys in the class. Every individual worked out his own idea after the general plan was once outlined. The size, shape, and materials varied. The main thought was that when the cabinet was completed each boy would have a place to keep his records, bulletins, books, and other supplies.

When the cabinets were finally painted, stained, or varnished to the owners' satisfaction they looked very attractive and resembled small wall desks. The side, opening down, provided a writing surface as shown in the picture. The interiors partitioned off provided the necessary spaces in which to keep the items mentioned above.

The cabinets were taken home and placed on the veranda, in the barn, or in the hen house and were accessible to me at all times. The location varied with the type of projects carried. This arrangement was convenient, as I suppose every instructor has called at homes when the family has been away for the day. However, with this system the records can be checked easily.

After the owners graduated and did not need the cabinets for project records, they used them for various purposes: some placed them in their rooms, others used them as medicine cabinets either in the house or stable where such a cabinet is always handy to have in some corner.

I hope the warming up of this idea will provide food for thought to other instructors and that in a few months they will write stories to the magazine describing their experiences with project record cabinets.

County Contest Aids in Carrying Out Supervised Practice Programs

D. R. PURKEY, Vocational Agriculture
Instructor, Old Fort, Ohio

THE Seneca County, Ohio, Chapter of F.F.A. (an organization of local chapter officers) set up a contest last year that proves successful in helping the instructors get their boys to carry out a successful supervised practice program. Each unit of supervised practice is given a definite number of points and the boy who has the highest number at the end of the year is given the honor of being a gold star F.F.A. member. This degree or honor is to be given to him before the county organization with appropriate ceremony and honor.

The list that follows is not final but can be enlarged and revised as the contest develops:

Animal Husbandry	*Points*
Cull poultry—per bird	10
Delouse chickens—per bird	5
Disinfect poultry house	50
Rotate range—per flock	200
Test milk—per test	10
Feed records—per cow per year	500
Production records—per cow per yr.	700
Clean and disinfect farrowing pen	50
Wash sow—per sow	50
Move to clean ground	50
McLean County Sanitation System	200
Flush sow	25
Ton litter	800
Plant hog pasture—per acre	100
Farm Crops	*Points*
Test seed corn—per ear	5
Field select seed corn—per ear	10
Store seed corn—per ear	10
Certified seed—per bushel	50
Treat seed potatoes—per bushel	25
Dust or spray potatoes—per application per acre	100
Miscellaneous	*Points*
Planting trees	25
Planting shrubs	15
Treating seed oats	50
Pruning trees	25
Pruning grape vines	10
Pruning berries	5
Farm accounts	750
Rotation of sheep pasture	200
Treating sheep for stomach worms	10
Treating hogs for stomach worms	10
Treating poultry for stomach worms	5
Castrating lambs	20
Docking lambs	10
Castrating pigs	30
Treating pigs (lice, etc.)	10
Building self-feeders for hogs	300
Replace bearings in disks (each)	2.5
Make concrete well platform	200
Make concrete tile outlet	200
Overhaul cutter	300
Overhaul motor	200
Install tile drain	40

This list is by no means the last word. The number of points per unit were assigned according to the desirability of getting that particular practice emphasized in this locality. Vocational agriculture teachers in the county who are responsible for its existence are: Mr. Stuckey, Thompson High School; Mr. Maty, Attica Rural; Mr. Hamilton, Bloomville High School, Mr. Barker, Jackson Township; Mr. Holtkemp, Green Springs; and the author.

Sophomore Boy Looks to the Future

HERMAN ZOBUST, Teacher, Audubon, Iowa

FRED SIEVERS, Jr., one of the most active high school pupils in the field of vocational agriculture in the state of Iowa, is the 15-year-old son of Mr. and Mrs. Fred Sievers, who live on a 320-acre farm northeast of Audubon. His father is one of the veteran stockmen of this county, who feeds several hundred head of steers to a prime finish each year. For several years Mr. Sievers specialized in the breeding of purebred Poland China hogs.

Having helped his father feed cattle since a mere child, Fred naturally developed a preference for feeding cattle, consequently he has chosen 40 head of purebred Hereford calves as his major home project to augment his work in agriculture during his sophomore year. The remaining part of his program includes the raising of 25 ducks, 150 chicks, and an experimental breeding plot of hybrid corn.

Fred Jr. purchased his calves March 10 from the famous Flowers herd at Sweetwater, Texas, when he accompanied his father who drives annually to Texas to buy his supply of feeders for the summer. The calves are uniform in size, high in quality, and all bear the same brand.

Young Sievers plans to feed his calves until early December. The feed ration will be materially reduced during the extreme warm weather, with heavy feeding beginning September 1. He keeps accurate record of the expenses and gains of the calves, weighing the feed and the cattle occasionally.

The present daily ration per head consists of a peck of ground ear corn and shell corn and two pounds of Champion molasses. Linseed oilmeal is fed three times each week. The young cattle are on bluegrass pasture, and have free access to salt, water, and a large barn, which is ample protection from the summer heat and flies.

Fred, upon entering high school, chose vocational agriculture from the seven courses offered by the school curriculum, mainly because of the project work which it sponsored. During his freshman year he raised 100 ducks, started a patch of raspberries, and produced 100 bushels of potatoes on one-half acre of sod in spite of the severe drouth. Fred is fully convinced that only northern grown certified seed potatoes should be used for seed.

The farm lad is as much interested in plants as he is in livestock which is shown by the corn breeding project under way. He will delve into the mysteries of plant breeding by producing the four pure lines and making the single and double crosses of the hybrid 939, which has been developed by the farm crops section at Iowa State College.

Studies and Investigations

Travel Allowances of Vocational Agriculture Teachers

J. A. KOVANDA, Teacher of Agriculture, Ord, Nebraska

J. A. Kovanda

A STUDY was made last year by the writer on the nature of the travel done by Nebraska vocational agriculture teachers in connection with their jobs. The first installment appeared in the February, 1936, issue of Agricultural Education.

Such travel included trips to district and state conferences of the Nebraska Vocational Agriculture Association, trips in behalf of the Future Farmers of America, visits to homes of prospective students, visits to homes of part-time and evening school students, trips to judging contests, and perhaps other meetings held primarily for teachers of vocational agriculture.

The Nebraska Vocational Agriculture Association convenes once a year. This organization is divided into eight Nebraska districts, and these districts also have meetings from time to time. Teachers invariably come to the meetings by auto. The average distance traveled each year by the teachers in driving to and from district and state conferences was 623 miles.

Future Farmers of America chapters were sponsored by three-fourths of the Nebraska vocational agriculture teachers, and 69.7 percent of the teachers did extra driving on account of this organization. The average distance of the extra driving was 265.6 miles, and the distances ranged from 20 to 2,000 miles annually per teacher. The majority of the teachers were not paid for this extra driving, but they apparently felt that the benefits derived were worth some volunteer transportation on their part. The driving included journeys to district F. F. A. gatherings, outing trips, athletic meets, and husking contests.

Driving done in connection with evening or part-time schools is a factor which greatly increases the mileage of Nebraska teachers. More than half of the departments had evening schools during 1934-1935, and part-time departments have been growing very rapidly. In this state it is customary to increase reimbursement to local districts five percent for each part-time school, and two and one-half or three percent for each evening school. It is expected, but not compulsory, that school districts pass this extra reimbursement on to the vocational agriculture teachers in the districts where they conduct these classes in addition to their regular day work, which they usually do. And most of the teachers reported that they received this extra reimbursement—but some did not. On the other hand, quite a number of teachers received this extra reimbursement and traveling expenses in addition.

Visitation trips are often made to homes of prospective students by teachers and superintendents who encourage them to attend high school, usually with an eye to the extra tuition money and other benefits which will thus accrue to the district. Vocational agriculture teachers are in an excellent position to do student solicitation since they are on the job during the summer. In Nebraska, 93.4 percent of the vocational agriculture teachers call on prospective students; in fact, 31.6 percent of these teachers are required to do so.

Agricultural judging contests are a popular activity in Nebraska as shown by the fact that 90.8 percent of the vocational agriculture teachers take students to these contests. Of the schools going to contests, 26.3 percent get all transportation paid, 15.8 percent get paid for driving only their own cars, and 5.3 percent have all expenses paid when participating in contests. Another rather large group of teachers, 19.7 percent, receive no additional reimbursement of any kind to cover the expenses of participating in judging contests.

Additional autos needed for field trips often cause an extra item of expense to departments of vocational agriculture. In Nebraska, the school pays for the cost of such additional autos in 47.4 percent of the departments, the students pay the cost in 28.9 percent of the departments, and the instructor pays the cost in 17.1 percent. One-fourth of the teachers haul students on field trips in busses, trucks, or trailers.

Nebraska vocational agriculture teachers all save on time and travel during project visitations by visiting several boys along a given route, on one drive, when possible.

Travel in autos is generally regarded by the Nebraska teachers as an indispensable part of a vocational agriculture program, 94.7 percent of them stating that they did not believe they could successfully teach vocational agriculture without the use of an auto.

Cost of Operating Automobiles by Kentucky Teachers of Vocational Agriculture

BELOW are the average figures on cost of transportation, as found by G. H. England, on the use of 75 cars by teachers of vocational agriculture in Kentucky, for the 12-month year ending August 1, 1933. The cars consisted of 31 Fords, 31 Chevrolets, 4 Plymouths, 2 Erskines, 1 Pontiac, 1 Willys Knight, 2 Desotos, 2 Chryslers, and 1 Buick. The figures are based on beginning, monthly, and end reports made to Mr. England by the teachers co-operating in the study.

Average total miles traveled during the year	10,653
Average miles traveled on the job	4,935
Gas used, gallons	640
Oil used, quarts	87.8
Cost of gas	$120.05
Cost of oil and greasing	29.35
Cost of repairs	61.89
Depreciation	95.79
License	12.32
Storage	18.14
*Insurance actually paid	15.34
Total average cost of operating for the year	352.88
Average cost per mile	.0331
Average total cost to the job	163.35

*Note: It is fair to say that the teacher himself carried some insurance, if the average amount paid was only $15.34.

At five cents per mile, the present state allowance on cars used for the state, the cost to the job for the year would have been $246.75.

Agriculture Students in College

SHERMAN DICKINSON, Professor of Agricultural Education, Missouri

ARTICLES have appeared in *Agricultural Education* from time to time reporting various interesting facts regarding vocational agriculture students in colleges of agriculture. Most of these have dealt with comparisons of the achievements of boys who have had vocational agriculture in high school as compared with boys who did not.

Almost without exception, such studies have shown, statistically and objectively on the basis of teachers records and grades filed in registrars' offices, that vocational agriculture students are superior to non-vocational students in abilities as indicated by grades. It is particularly encouraging to note that, in most cases, such superiority is demonstrated not only in the field of technical agriculture, but in science and academic courses as well. Various reasons have been advanced for this situation, most of them boiling down into the simple statement that these vocational agriculture boys are better students.

Altho agriculture in high school is not to be regarded primarily as a college preparatory course, it is very evident that such training is at least not a handicap to the student who continues his formal education beyond the twelfth grade. If there is something about these vocational boys—no matter what—which makes for a higher quality of work in college, then the colleges should be particularly interested in having them matriculate. Most agricultural colleges are recognizing this fact and are evincing an interest in the vocational group as such.

This interest is taking various forms. Most institutions now sponsor a conference and contest event for vocational agriculture students; many are putting forth special efforts to assist teachers in keeping up to date on subject matter thru supplying bulletins and services of extension specialists; others are providing special short courses for graduate study. Some agricultural colleges are promoting their own interests and assisting students as well, by offering scholarships in varying amounts to vocational agriculture students on the basis of demonstrated ability and achievement. Colleges are also realizing that their best supporters in recruiting students are the teachers of agriculture, who, in the large majority, are their own graduates.

Figures have just been released by the Dean's Office of the Missouri College of Agriculture which are interesting in this connection. For the college enrollment as a whole, considering only the men, 44.92 percent of the total enrollment (492) has had one to six units of vocational agriculture in high school. This is a significant proportion and its significance is emphasized when the figures are examined for each class. In the Senior group, 36.84 percent had vocational agriculture in high school; of the Juniors 37.35 percent presented such units; the Sophomores were 43.09 percent vocational; while of the Freshman, 50.66 percent enrolled with vocational credits. The steady increase during the four year period is definitely evident and there is every reason to believe that the proportion will continue to grow in the same direction.

In Missouri it has been possible for a student to present as many as six units of vocational agriculture for entrance into the college of agriculture. It is interesting to note the trend in numbers of units presented over the past four years. The following table indicates this situation for all four classes now in school; the percents are, of course, in terms of vocational boys only:

Presenting 1 unit	9.63 percent
Presenting 2 units	10.29 percent
Presenting 3 units	9.53 percent
Presenting 4 units	17.40 percent
Presenting 5 units	14.74 percent
Presenting 6 units	38.41 percent

While the nature of the above data precludes drawing any conclusions as to *tendency*, they do indicate that, of the group now enrolled, over one-third took all the units of vocational agriculture offered in high school.

A tendency, if any, could be discerned only by a study of the data for each class. Such figures are available, but an examination thereof suggests no very positive conclusions. Apparently paradoxical is the statement that in the past four years there has been an increase in the number of boys entering with one unit of credit and also of boys entering with six units. Making such a situation possible is the slow decline in the proportion presenting three and five units. The proportion presenting four units has been erratic; the percentages, beginning with Seniors are 14, 16, 24 and 14. It is the opinion of the writer that the modification of the high school organization will cause the four unit presentation to be the more common from now on.

It is quite probable that data of this sort compiled from the records of other colleges of agriculture would show similar situations. Some institutions doubtless have an even larger proportion of students with a vocational agriculture background. For the colleges it is important that this condition be recognized and that desirable adjustments in curricula, courses, and methods be made. It is equally important that high schools also be cognizant of the situation and not only continue to train so that graduates maintain the high standard indicated, but possibly modify their programs as well.

Accepting Their Responsibilities

J. R. GRAHAM, Vo-Ag. Teacher, Sudlersville, Maryland

THE question, "Do the boys who study Vocational Agriculture make use of it after they leave school?" is one that is frequently heard. There are doubtless statistics on the subject which may prove much or nothing, but a brief summary of the work being done by six boys—all less than two years out of school, proves that some at least are profiting by the course. All six took their work at the Sudlersville High School on the Eastern Shore of Maryland, in a section devoted to general farming, poultry and truck.

No. 1. This boy, in the course of his Vo-Ag work, became interested in purebred livestock, particularly swine. His first purchase was a purebred sow from which he raised a number of pigs. With the proceeds from those he sold, he bought more hogs and a purebred Guernsey bull. At the present time, as a result of this, all the sires used on the farm are purebred. The boy undertook the management of the entire farm last winter, when his father was incapacitated, and is still active in the running of it.

No. 2 decided there was money in chickens. Thruout his four years in vocational agriculture he had carried poultry projects and had always shown a profit. Using the plans studied in school, he constructed four houses in which he broods about 1500 chickens a year. This year he painted all the buildings on the farm, has begun putting modern improvements in the house and has done landscaping. With his father, he is running three farms and what is more to the point, is making money at it.

No. 3 chose swine and dairy projects while in school and his interest has never lessened. He has the nucleus of a very fine herd of purebred cows and the entire farm shows improvement in stock and seed for crops.

From a financial point of view, No. 4 had the best opportunity of any of the six. After graduation, his father turned over the home farm to him. He first concentrated on the dairy and is now producing Grade A milk for the Philadelphia market. He next turned his attention to sheep and has accumulated a fine flock of purebreds.

No. 5 is in direct contrast—unable to finish school on account of a sick father, a run-down, debt-[illegible] with no livestock and no money, he has buckled down to raising truck and poultry and thus far has managed to make ends meet. A neighbor gave him the use of an acre of land on which he raised a crop of tomatoes. With the proceeds he bought his first purebred chickens. He is now starting his second winter with a good sized flock of Leghorn hens and pullets as well as some turkeys and ducks.

No. 6 also had no money, but by trading his labor for calves and pigs he has accumulated some purebred livestock. He is farming with his father and endeavoring to put into practice some of the teachings of vocational agriculture.

It is true that the achievements of these six boys do not sound impressive—none made enormous profits nor won outstanding prizes, but it must be remembered that with a single exception all had to start from scratch. What stock they have, they bought from their own earnings—all they possess, they have gotten by their own efforts, yet each has forged ahead. It is vocational agriculture that has enabled them to do better those things they were going to do anyway, that has fostered in them a love of farming, a co-operative spirit, an acceptance of responsibilities and thus each boy is developing into a good farmer, a good business man, a good citizen.

Our Cover

THE Future Farmers of Waldo, Ohio, set a real pace for the state when they organized the "Waldo High School Seed Company" for the purpose of testing and providing seed corn to the farmers of the local community. The shortage of tested seed corn in this area gave rise to worry and concern. The Future Farmers talked the whole matter over, formed an organization, got out their rag dolls, and notified the patrons they were "ready for business." A charge for testing was made of fifty cents per hundred ears up to five hundred ears; forty cents per hundred for five hundred to one thousand; and thirty cents per hundred for all over one thousand ears. The company equipment was taxed beyond capacity. Additional equipment was purchased, and the hours of the shift were lengthened into the night.

The low germinating record of the seed corn in the Waldo area soon became apparent. The Future Farmers of this co-operative searched the country far and wide for improved seed and gave needed help by selling outside seed on a commission basis. Forty thousand ears tested was the score in the early part of the planting season.

According to Chapter Adviser Lukems, "The profits earned by the company will be divided among the members on the basis of the number of hours each has worked. This money must be used to help finance a productive project, placed in a savings account, or used for the annual F. F. A. tour."

This venture has provided the company with an opportunity for some splendid business training. Expansion has taken hold, and the boys have constructed a seed-corn duster or disinfector and additional service is being offered the local farmers.

Future Farmers of America

National F. F. A. Officers Meet

Left to right: Leon Hubbard, vice-president (4th), Oregon; Owen Owens, vice-president (2nd), Wisconsin; Stanley Tschantz, vice-president (3rd), Ohio; Andy Fulton, vice-president (1st), Arkansas; William Shaffer, president, Virginia; Julius Black, student secretary, Iowa; W. A. Ross, executive secretary; and J. A. Linke, national adviser, Washington, D. C., at their annual meeting of the Board of Trustees, April, 1936.

IT WAS a busy week for all concerned. A few night sessions were even necessary to transact the accumulated business. Among the important problems were: plans for the ninth convention; plans for the tenth anniversary celebration; constitutional changes; alumni organizations; collegiate chapters; national publications; contests and awards; national program of work and policies.

On Thursday evening the boys were entertained at the home of J. A. Linke and on Saturday at the home of W. A. Ross. Easter Sunday the boys attended Christ Church in Alexandria, Virginia, and sat in George Washington's pew. Points of interest visited included the White House, Capitol, Mt. Vernon, Arlington, Washington Monument, Lincoln Memorial, and National Museum.

Monday, April 13th, being National F. F. A. Day the national officers participated in the F. F. A. broadcast on the N. B. C. Farm and Home Hour. That night they were guests of President Bill Shaffer's chapter at a county F. F. A. banquet held in Woodstock, Virginia. The following day a tour of Shenandoah County was arranged.

Returning to Washington on the afternoon of the 14th the business was completed by the following evening, and the members left for their respective homes. The members of the Board of Trustees range in age from 18 to 20 years and are to be congratulated on their interest and efficiency as national officers of the largest farm boy organization in America.

F. F. A. radio broadcast given second Monday of each month, during Farm and Home Hour, over N.B.C. stations. Theme—Rural Institutions. Support the programs by listening and sending in your comments.

Anniversary Messages

W. A. ROSS, National Executive Secretary, Future Farmers of America, Washington, D. C.

THE following messages were read as a part of the F. F. A. radio program on April 13, 1936. This program marked the completion of the fifth year of F. F.A. programs.

President Franklin D. Roosevelt—

"The President of the United States authorizes me to extend cordial greetings to the Future Farmers of America. The President expresses hope that these prospective agriculturists, who are now preparing themselves for their life work, will embrace every opportunity to equip themselves fully for the responsibilities which presently will rest upon their shoulders. In their school work and in their life work he wishes for them the fullest measure of success."

* * *

Henry A. Wallace, Secretary of Agriculture—

"I wish to congratulate the Future Farmers of America on this anniversary broadcast and on their constructive activities. They have reason to face the future with more hope than was possible three or four years ago; my best wishes will follow them in the years to come."

* * *

John W. Studebaker, United States Commissioner of Education—

To the Future Farmers of America: "I am very sorry that other duties make it impossible for me to participate personally in your program. But I am pleased to have this opportunity to send a word to the throng of young men on the farms throughout the Nation who love the great outdoors, who feel the stirring challenges of an occupation which is basic to life itself for our vast population, and who see that happiness is not to be found in power over others but rather in self-mastery, and in the abiding satisfactions of work well done in co-operation with others. I congratulate you and am proud that I may work with an organization which I am confident will make increasingly valuable contributions to the Nation—The Future Farmers of America."

* * *

L. J. Taber, Master, National Grange—

"It is a pleasure to extend greetings to F. F. A. workers. We pledge you the co-operation and support of our organization and wish you a most successful year in your school, vocation, and organization activities."

* * *

Edward A. O' Neal, President, American Farm Bureau Federation—

"Best wishes to the Future Farmers. You will be running the big show tomorrow. You will do that job better because of the training you are getting now."

* * *

E. H. Everson, President, Farmers Educational and Co-operative Union—

"Greetings to the Future Farmers of America—may you concentrate your efforts towards securing economic justice for the farmer. Cost of production should be your goal."

* * *

J. C. Swift, President, American Royal Livestock Show—

"Future Farmers mean much for livestock and agriculture, but even more for law, order, and higher citizenship. They are the real social security."

* * *

W. A. Cochel, The Weekly Kansas City Star—

"Our greeting to Future Farmers is the extension of Star Farmer Awards this year to each region. One will be selected as the Star Farmer of America."

* * *

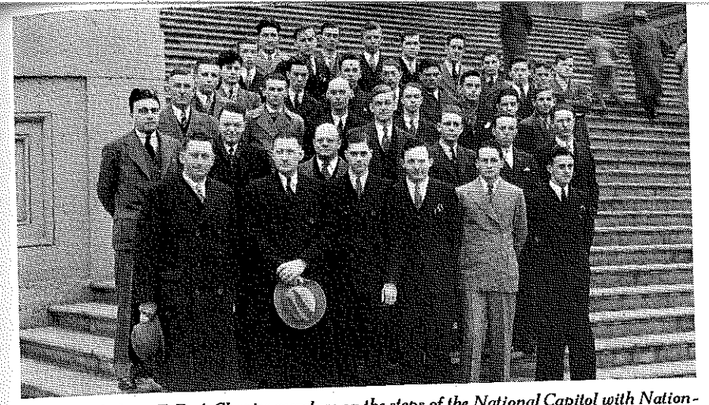
W. H. Weeks, Vice-President, Kansas City Stock Yards Co.—

"Congratulations to the unconquerable spirit of earn, learn, live, and serve that guides the Future Farmers of America. You have already become a militant force in better livestock agriculture and citizenship. Your work deserves highest commendation."

* * *

Ray L. Cuff, Livestock Commissioner, Kansas City Livestock Exchange—

"We need have no fears for tomorrow while the Future Farmers of America organization increases and maintains its present high ethical and practical standards in agriculture and citizenship."



Guilford-Madison F. F. A. Chapter members on the steps of the National Capitol with National F. F. A. Officers and Congressman James A. Shanley of Connecticut and other friends

THE whole world isn't "going to the dogs" these days; some of it is going to Washington, D. C. More than forty respectable farm boys ran away from home in one Connecticut community when the Guilford-Madison Chapter F. F. A. set out for a four-day visit to the nation's capital, April 6 to 9.

Spring migrations are usually northward but the boys had planned their trek southward a year ago, so don't jump to the conclusion that the severe winter and history-making floods account for the reversal. Boys and birds differ, you know. The boys conduct their meetings in parliamentary form at home and just dropped in to see whether Congress and Connecticut representatives were on their jobs. The Washington Monument, Lincoln Shrine, Tomb of the Unknown Soldier, Mt. Vernon, and the new quarters of the United States Department of Agriculture also held their attention.

As future farmers the boys appreciate that Washington was a master farmer in addition to his other attainments. Many an understanding chuckle they have had from an obscure reference in one of his diaries to a tour of inspection on his estate wherein he visited a crew of wood choppers. He timed the work and noted that at the rate of work witnessed, five times as much wood should have been already cut since the job was started.

The Guilford-Madison boys are back home now telling the other high school fellows of their trip and making plans for a year from now.

The Value of the F. F. A. to a High School Student

Note: Following are excerpts from a talk given by Kenneth Fulk of Clarinda, Iowa, a high school student, before the Iowa Vocational Agriculture Teachers' Conference held at Iowa State College. The boy's statements are well worth reading.—The Editor.

"The F. F. A. is a national agricultural organization with clear-cut purposes, ideals and a program in which all vocational agriculture students may have a part. It has provided me practical experience on my own level and with my own problems. It has increased my chances to learn new ways and things.

"Before I started to high school I had the impression that the farm was all right for some people but I wanted to be somebody—a lawyer or a doctor or maybe a teacher. I didn't know that different courses were offered. I thought that high school was just the same as grade school, everything was laid out and I had only to follow. Just as I arrived at school a funny fellow with glasses ushered me over to one corner and before I knew what it was all about I was talked into taking vocational agriculture. If every farm boy could fall for the same line as I did there would be no reason to worry about the future of agriculture or of the world. It has paid me dividends every time I have done anything. I have found there can be prestige and dignity in farming.

"I have been encouraged and assisted in the right habits of living thru F. F. A. work. It has inspired me to do greater things. It has offered me things to do which were not only enjoyable but educational as well. If it had not been for the possibilities offered in F. F. A. work and those heart-to-heart talks with my adviser I should never have graduated from the Green Hand degree. Future Farmer work has broadened my outlook on life. It has helped me to distinguish between 'living' and 'existing.'

"The F. F. A. organization not only teaches a boy how to co-operate with others, but also how to co-operate with himself and to deal fairly and squarely with himself. Many boys lose out by cheating themselves in that they do not do justice to their opportunities or because they overdo them. Future Farmer work trains boys not only to be farmers but to be farm citizens and people who make the world go round.

"It is the natural tendency for every young boy to do something. No matter where you put him or under what circumstances, as long as he is alive he will do something. It is within the power of you instructors—you hold the magic guide it either the right or the wrong way. You can make this energy operate a mechanical man or a real man. Boys guided in the wrong way are merely machines.

"By working with boys in the F. F. A. organization you can accomplish many desirable undertakings which cannot be accomplished alone. It will improve your quality of teaching and your efficiency as an individual. A good F. F. A. chapter is one of the greatest advertisements for a vocational agriculture department. From a purely selfish and financial standpoint Future Farmer work is worth while to the instructor. It gives him a chance to show others thruout the state and country that he can do things, and thereby get positions that pay more money.

"Far beyond the selfish and financial standpoint Future Farmer work gives the teacher the satisfaction of knowing that he is doing something constructive for humanity. Satisfaction in the right sense is worth more than all the gold in the world. It is the standard upon which you as an individual value your living.

"May the opportunities which are in the F. F. A. be extended to all the farm boys in Iowa, and may you as vocational agriculture teachers make use of your opportunity and give it to them."

Turkey Project

(Continued from page 5)

ing it to his profits you have his labor income for the summer, or $313.43.

The above figures revealed that Warfield's production costs the first year were ten cents a pound. His losses amounted to 25% as 229 poults were hatched and 173 birds grown to maturity.

Donald Warfield is continuing his training in the Billings Department of Vocational Agriculture under the instruction of Z. G. Hudgin and is furthering his farm set-up in 1936 by renting a place adjoining his father's ranch. Here he will grow and store corn and cereal grains. Donald will not grow turkeys during 1936 but will allow his pastures to be free from turkey grazing, and in 1937 he will attempt to grow 1,000 birds. By this time, his ranging premises should be free from disease and with an adequate supply of feed he should have even greater success as a thrifty Future Farmer.

Follow The Gleam

"WHAT a glorious thing it is to be young and active, in the prime of life, serving a useful place as teachers of vocational agriculture, and living these challenging days!" I have wondered whether the men in their twenties and thirties really appreciate the blessing that is theirs, in being at these ages with great visions ahead. My advice is to keep the visions, "follow the gleam," and fill every day with happy useful service to those with whom you are privileged to live day after day. I believe we will be better teachers of agriculture and boys, if our lives are radiant with the appreciation of the fact that we are in vigorous young manhood and that we shall pass this way but once.—W. A. Nolan, University of Illinois.

Identification of the Farmer With His Community

W. A. SMITH, formerly State Adviser, Indiana Association of Future Farmers of America

THERE is an implication in the name —"Future Farmers of America" which suggests that the members of this organization are in a state of development or of training. By the very nature of that training, the young men who make up the hundred-thousand members are in various stages of this training or developing process—some have entered formal training in vocational agriculture departments for the first time this year, others have completed the four year program of the all-day instruction and are making less formal and less frequent contacts with the vocational department thru part-time and evening school groups, but in all cases they are in training for farming. It is my purpose here to consider with you one of the several phases of this training program — a phase which we will name—"Identification of the Farmer With His Community." Of what significance is this to the young farmer and to the Future Farmer? What importance does this have to the Future Farmer organization—to the local F. F. A. Chapter? Is this a part of a changing farm world?

The farmer has long been thought of as an individualist, a man and his family who lead an independent life. It is not uncommon, even today, to speak of the farmer and farm family as being quite independent of other walks of life and other people—even other farmers and farm families. This notion carries over from earlier history in this country when the farmer and his family pioneered the land and of necessity had to be self-existent for all their wants of food, shelter and clothing. Those who may think of the present day farmer as having no need for co-operation with other farmers or need for business and social associations with other people have failed to acquaint themselves with the present day vocation of farming and present day rural community life. More and more we are coming to working in groups with group action a necessity to our best economic and social interests.

To illustrate this point I need only refer to the developments in agricultural production which are occurring with such rapidity in present day farming. Whether it be improving the livestock, the crops or soil condition, whether it be insect pest or disease control, the development of improved marketing practices or introduction of new varieties of crops, you will quickly recognize—perhaps because of some previous experience—that group action succeeds faster than independent, individual action. In other words, new or improved practices in production are going to be of greatest benefit where communities of farmers, planning and working co-operatively, accept and promote them.

What about the social aspects of our problem, for surely the identification of the farmer with his community means more than participation in group and community activities in order to improve economic welfare. I am thinking now of those things which make farm life more enjoyable, make farming more than just an occupation. Some speak of farming as a mode of living. It was a mode of living back in pioneer days, but that type of farm living is history. Our various community organizations have gradually made possible a new mode of farm living—(or at least they are doing so)—in which the farmer and the farm family are having opportunities for social contacts, educational advantages, wholesome recreation and pleasure more nearly equal with those of people engaged in other vocations or living in locations other than rural areas. Have you ever counted the number of opportunities that exist in your community for participation in organized activity of a kind which affords desirable social and recreational advantages? I must confess that I was somewhat surprised in the results of an investigation of rural communities made for just this purpose in two Midwestern states this past summer. In this survey, teachers of vocational agriculture were asked to name the opportunities, existing in the communities in which they were teaching, for young farmers and prospective farmers to participate in organization activities, especially those which would provide social, civic, recreational, and co-operative experiences. I believe that we will agree that the teacher of vocational agriculture is about as familiar with such opportunities in the community in which he teaches as anyone. Therefore, the results of this survey should give a fairly accurate picture of this type of rural organization activities.

HOW many different organizations would you estimate were named by the teachers representing one hundred thirty-one rural communities in one of these states? There were ninety-six organizations listed in the summary of replies, ranging all the way from local units of the national farm organizations such as the Farm Bureau and the Grange, to local social organizations such as literary societies, booster clubs, nature study clubs, and athletic organizations such as volley ball and basketball leagues. I have attempted to group the ninety-six different organizations named in the list made up from these communities. Under the heading of farm organizations we find three named and one or more of the three are found in each of the one hundred thirty-one communities. In the estimation of the vocational teachers, the farm organizations provided an opportunity for young farmers and future farmers up to twenty-five years of age to participate in their activities. It is my own opinion that considerably more might be done by these organizations to make a place in their programs for the young farmer than is now the case. Perhaps that is something to which you Future Farmers might give attention in your communities. I feel sure that you would find your local Farm Bureau unit or Grange ready to try to make a larger place for you in their programs if you would make clear to them the kind of a place you want.

To continue with the summary of the survey—we find various kinds of organizations, built around livestock and crop enterprises, existing in forty-eight of the one hundred thirty-one communities. Some of those named were—livestock marketing and breeding associations, beekeepers association, horticulture society, vegetable growers' association, the threshing ring, and milk associations. The next grouping of organizations I have called community civic and social groups. There was at least one such organization in each of the one hundred thirty-one communities and in some there were several. There are thirty-seven different organizations named, or, I should say, thirty-seven different names given to these social and civic groups represented in the communities. The parent-teacher association led the list in number of times named. Some of the other organizations recurring most often were —lodges, community club, conservation club, young men's political clubs, agriculture club, high school alumni association, athletic club, and musical organizations.

Religious organizations occupied a prominent place in the communities as opportunities for participation by rural young people. In addition to naming the church and Sunday school, various kinds of young people's organizations in the church were included in fifty-two of the lists.

I was very much interested in the contribution being made by vocational agriculture departments of the high school to this problem of providing organization activity for rural boys and young farmers. As you might expect, Future Farmers of America chapters headed the list. Other organizations listed included vocational agriculture clubs, junior farmers club, agricultural alumni recreation club, and in one community there was an agricultural alumni association.

A miscellaneous grouping of organizations included local and county fair associations, the farmers' institute, adult evening school in agriculture, Boy Scouts, Hi-Y, and Y. M. C. A.

These are some of the ninety-six different organization opportunities named. It is of interest to note that the median number of different organizations for the one hundred thirty-one communities was seven, and thirty communities had this median number of organizations in which opportunity was provided for the young farmer to participate. The smallest number reported in any one community was three and the largest was thirteen. These figures were taken from the summary of replies made in one of the two states. However the summary of replies from the other shows a quite similar situation from the standpoint of both the kinds of organizations represented and the number per community.

What is the significance of all this? Does it make any difference whether the rural community provides opportunity for organized effort? Should the farmer and the members of his family have opportunity to join with other members of the community in the solution of problems of economic, recreational, social, and civic interest to all of the community and to each individual in it? If your answer is "yes," and I think that you will agree with me that that should be the answer, then we need to give attention to two things—first, discovering the opportunities that exist or can be created for us to become identified with our communities, and second, equipping or training ourselves to participate with greatest satisfaction to ourselves and in the best interests of the community of which we are a part. If we recognize that the farmer is no longer the individualist that he once was, that the welfare of the farm family is increasingly dependent upon others outside the family, then we need to give attention to co-operation in social enterprises.

This is a changing farm world. The change is more commonly thought of as one of economics. But closely related to that change, and of no less importance, is that of social welfare. In order to keep pace with this changing farm world,—better yet, in order to be prepared for it and to guide the change, I suggest to you young farmers that you give attention to your participation in your community, to your co-operation in social enterprise. The challenge to you, if you would keep farming a mode of life, a way of living, which, in this changing farm world, will become more and more satisfying, is that you become an active participant in the desirable activities of your community that now exist and work toward the creation of any new community social activity for which there is need or for which need arises. Therein lies one of the greatest functions of the Future Farmers of America organization. Thru it you are obtaining a necessary training for participation in your community.

Chapter Conducts "Safety" Program

WILLIAM THOMAS, Adviser, Townsend, Montana

A SERIES of safety programs was launched by the Broadwater F.F.A. Chapter, Townsend, Montana last fall, the first of which, dealing with safe driving of motor cars, was presented on September 26th.

Arrangements were made with the high school principal to conduct the programs in the assembly room with all students attending. A delegation of the townspeople was present at this first meeting.

Atmosphere for the proceedings was provided by the presence on the stage of an ancient Model T Ford picked out of the dump yard from the exact spot where it was thrown by a fast-moving train a number of years ago.

William Guffey, chapter secretary, opened the program with a short talk on some recognized bad practices of driving which he illustrated with blackboard sketches. Herman Moudree, F.F.A. department editor for the school paper, presented charts showing the amazing distances a car will travel between the time a driver sees danger and the time when the car comes to a full stop. The chapter president, William Kenney, concluded the program by reading an article entitled "And Sudden Death," by J. C. Furnas.

Future Farmer Grows Sanitary Pigs

MARION PULLEN of Damascus, Georgia, wins $59 premium above market price.
GEORGE I. MARTIN, Assistant Supervisor Agriculture, Tifton, Georgia

THE Future Farmer boys of Southern Georgia are learning that hogs can be "dirty as pigs" and yet be "sanitary." They are learning that sanitary pigs pay greater dividends than hogs raised on the old plan.

Marion Pullen, vocational agriculture pupil of Damascus, Georgia, has written a new chapter in hog production for the farmers of the Damascus territory. Last October Marion, under the direction of A. P. Lewis, his vocational agriculture teacher, took three, purebred Duroc sows for his swine sanitation project. These sows farrowed a total of twenty-four pigs all of which were raised. Marion sold three of his pigs when they were three-months-old gilts. The other twenty-one pigs and three sows were fed until the third day of April on the ration of corn and tankage with mineral supplement. During the entire feeding period they had the use of pastures of peanuts and oats. At the end of the feeding period (April 3) twenty-one of these pigs were sold to the Moultrie Packing Plant. The other three were kept for breeding sows. The twenty-one pigs that were sold averaged 195 pounds each and brought on the market $249.64. The three sows kept for breeding purposes were valued at $16 each. By adding what Marion received for his twenty-one hogs sold at the packing plant, the three sows kept for breeding purposes and the three gilts sold at weaning time we have a total of $312.64 which Marion received for his hogs sold at market prices.

But Marion hasn't yet told the most interesting part of his story. By raising these hogs on the sanitary plan he received a premium of $59.00. This premium came as a result of the hogs being free from parasites. This premium added to the market price of his hogs gave Marion a total of $372.64. Marion's expenses incurred in growing out these hogs was $167.75. After deducting expenses Marion's profit was $204.89.

The plan used by Marion Pullen in growing out his sanitary litters is the same plan used by approximately 100 vocational agriculture pupils in Southwest Georgia this year. This sanitary plan of raising pigs was worked out by Dr. H. B. Raffensperger in charge of swine sanitation in South Georgia for the United States Department of Agriculture. In brief, and in its simplest form Dr. Raffensperger's plan is nothing more than growing pigs to hoghood on premises free from hog parasite infestation. It means keeping the pigs, from the time they are farrowed to maturity, away from old hog runs where the soil is laden with millions of swine parasite eggs. By keeping the pigs free from parasites the best use of the hog feed can be made. This boy, Marion Pullen, was able to get a gain of one pound of pork for every 3.65 pounds of feed fed to his hogs.

This sanitation plan of growing hogs is not entirely new. Dr. Raffensperger and the vocational agriculture teachers of South Georgia are going [illegible] in a rather aggressive way. They expect to increase their sanitary litters with each coming year. Last year twenty sanitary litters were grown out by the vocational agriculture pupils of South Georgia. Dr. Raffensperger says this was a good start. At the close of last year these Future Farmers in co-operation with Dr. Raffensperger, the officials of Swift Packing Company, and the vocational agriculture teachers conducted a livestock day at the Swift Packing Plant, Moultrie, Georgia. Twenty litters grown under sanitary conditions were shown at this livestock show. The show was widely advertised and was attended by more people than ever attended a similar occasion in South Georgia. At the close of this year the boys will have another livestock day at which time they expect to assemble 100 litters or 10 carloads raised under sanitary conditions.

The work that these boys are doing is destined to revolutionize the hog industry of South Georgia. The soundness and worth-whileness of this sanitary hog program is evidenced by the interest manifested by the business men and agricultural leaders of the country.

Local F. F. A. Cares for Orchard

OTIS L. WHITNEY, Teacher of Agriculture Georgetown, Kentucky

THE Future Farmer chapter rented a farm orchard consisting of forty trees, for three consecutive years. The orchard is located about 100 yards from the school in the corner of two state highways, in a community in which very few apples are grown; and in a section of the state in which on an average only two out of five years are favorable for apple production. The trees in the orchard are 17 years of age. It is distinctly a farm and not a commercial orchard. There are several varieties represented.

In the winter of 1933 the junior and senior agriculture class were studying "Home Orchard" enterprise and took a field trip to the orchard to do some practical pruning. The boys became interested and wanted to rent the orchard and carry it thru as a group project. Mr. Chenault, the owner, said he had never realized any benefit from it except the few apples he used. The agreement was as follows: The owner to furnish all materials, such as spray materials, fertilizer, and baskets and receive one half of the apples, the F. F. A. were to do all the labor for one half of the apples, or one half of the money if the apples were sold.

Care and Management of the Orchard

After renting the orchard the boys finished the job of pruning. Many neighbors stopped and told the boys they would kill the trees by so much cutting. The boys came to the instructor much distressed, telling what the passers-by were saying about their pruning. The boys looked up many references on pruning of commercial orchards in this and other states to see if the method they were using was approved. The criticism made the boys more determined than ever to have

more and better apples than anyone else in the community.

This spring the boys were highly complimented by Prof. Olney of the horticulture department of University of Kentucky on the way they had cared for the orchard. All pruning has been done during class time under supervision of the agriculture instructor.

The class top grafted two trees. About seventy-five per cent of the grafts lived. The scions were taken from the desirable varieties in the orchard.

Immediately upon renting the orchard the class set to work to determine the sprays that would pay, and how to apply. After spending some time in studying schedules from various state experiment stations and some commercial orchards in the western part of the state it was decided to adapt the schedule, recommended by the Kentucky Experiment Station.

After studying ways of increasing the yields the boys decided to apply fertilizer. Three hundred pounds of Nitrate of Soda were applied around the trees in 1933, two hundred and fifty pounds were applied in 1934, and the same amount in 1935. The fertilizer seems to make the trees more vigorous and enables them to withstand freezing.

In 1933 the rented orchard not only had more and superior apples than any in the community but was about the only orchard that bore. The Future Farmers sold seventy-five bushels ranging in price from fifty cents to one dollar, depending on the grade. In addition to the apples sold some of the unmarketable varieties were made into cider and vinegar. The owner estimated that the passers-by picked at least one half of the crop as apples were scarce in the community, and the orchard was along a public road. The boys' profits were about $30.00 from which they bought materials and constructed a trailer to use for their projects, and bought some equpiment for the farm shop.

In 1934 the yield was poor, but the quality of the apples was good, and sold for seventy cents to one dollar twenty-five per bushel according to grade, all fruit being engaged before being picked, and many customers were turned down. The profits for this year were fifteen dollars for the F. F. A.

This year (1935) the yield is very light due to the late freezes and very rainy season so that spraying effectively was impossible. Most of the apples were killed by the freezes and the remainder are badly infected with scab. This has been the worst year in history, of this section of the state, for scab.

The apples were sold to farmers and to grocery stores in a near-by town. Many of our best customers are the men who criticized us for the waste of time and money for spraying, fertilizing, and pruning the orchard.

As a source of financial returns the orchard has not paid the F. F. A. so well. As a means of teaching both high school boys and adults, it is very successful. The members of the local chapter of F. F. A. are proud of their project and plan to continue its operation, so that when a good season for apples does appear they will be ready to cash in with a large crop of good apples.

Future Farmers of Greece

C. S. STEPHANIDES, Agriculturist, Metollikon, Kilkis, Greece

IN June 1935 issue of the Agricultural Education Magazine our friend Mr. Wayne W. Adams had the kindness to describe our attempts to organize F. F. of G. His close contact with numerous young farmers of Macedonia (while working for the Near East Foundation) and especially of Megali Vrisi has been an impetus towards organizing such clubs. His efforts for young farmer movement have already gained some ground.

One of the first chapters of F. F. G. was organized in Megali Vrisi of Kilkis area. This section since 1912 has experienced three wars: Balkan wars, Greco-Bulgarian, and the Great War, where the battle of Grand Corona and Doirani were fought. During the Balkan wars many of the villages were destroyed and the population scattered to many corners of Macedonia. With the exchange of population the section has been dotted with many new villages most of them bearing their home village name.

The population of Megali Vrisi, where the nucleus of F. F. G. was organized, is composed of Throcians and Caucasians and each one has its own distinct mode of living and habit of work. Due to the efforts of the Near East Foundation we were able to bring together in a common club both races. Twenty-three boys were enrolled ranging from fourteen to twenty-three years old. Having in mind the experience with the usual clubs in Greece we had to set down some definite program of work that we had to follow during the year. Our main object has been to absorb as much as we can the leisure time of the boys for useful and productive purposes.

After selecting six of the active boys we set down to organize a yearly program. We divided the whole program into different departments and appointed an officer for each. The departments were as follows: athletic, agricultural, dramatic and music, recreational, community, and educational.

The athletic department had to organize two teams, soccer and volley ball. A field day for the village at which all six villages could take part. Also interchange soccer and volley ball meets.

Agricultural department. To organize a group project for the benefit of the club. The agriculturist of the area should select the crop to be planted and the work to be done and hold responsible the officer of the department for its completion. To reforest with pine trees the near-by hill of the village. Advise each member to build a poultry house and plant ten fruit trees in his yard.

Dramatic club. Organize comedies and plays suited to the taste of the village, at least three during the year, thus provide some kind of amusement to the hard working villagers who are deprived from many things that our present civilization has for the city people.

Recreational department. Organize indoor games during winter months. Picnics and excursions to near-by villages in the summer.

Community department. This department had to face hard work to accomplish a few of the community jobs. Repair worn out roads. Fill up the mud-holes in the village. Drain off the swamps and apply crude oil on the surface to fight the malaria-bearing mosquitoes.

Educational department. To take care of the small library and the magazines. To open the library at the appointed hours. Organize lectures on health sanitation and agriculture. Invite in persons to lecture about religion and history.

We have started a new program for the coming year. I am sure in the near future we will be able to do more not only for our village but also the farmers.

Dairy Herd Improvement Association

(Continued from page 7)

affiliate with the regular dairy herd improvement association upon graduation, shortly thereafter, or when he becomes established in farming.

2. To maintain interest and stimulate a desire to complete a four-year testing program we offer the following recommendations:

a. Provide efficient equipment.
b. Provide interesting devices to carry out the work.
c. Provide recognition for continuous testing.
d. Compile and summarize results of testing work to show what is and can actually be accomplished with a long-time testing program.

3. In reference to records we feel that the following procedure is advisable:

a. Develop an efficient and simple but adequate system for keeping records.
b. Include feed records for at least one year.
c. After completion of feed records for one year we advocate that the matter of keeping feed records be optional.

4. Affiliation of the local associations with the dairy herd improvement association office at Madison is recommended after the instructor is satisfied that he has an efficient organization in operation. After affiliation all reports required are to be sent in promptly and regularly in order to facilitate the work in the Madison office.

5. Considerable discussion was heard on the procedure or methods of making the butterfat tests. The committee suggests that each instructor check over the procedure followed in his department with that recommended by the dairy herd improvement association.

6. It was recommended, and accepted, that some member of the state office visit the junior dairy herd improvement associations in Wisconsin wherever and whenever possible and convenient for the purpose of discussing problems on testing work and to help in matters of mutual benefit to both organizations concerned.