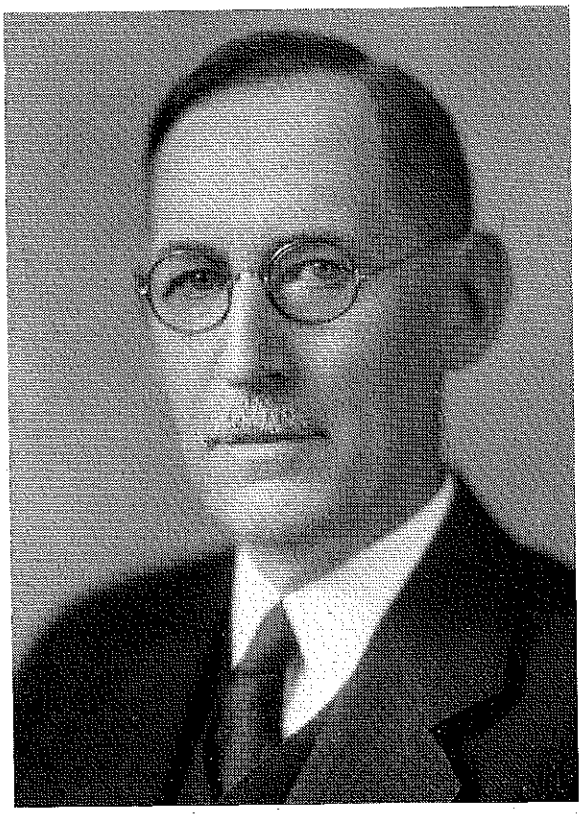
Vol. VIII NOVEMBER, 1935 No. 5

Agricultural Education



George P. Hambrecht, President
American Vocational Association
(See page 66)

Annual Meeting
American Vocational Association
December 4-7, 1935
Headquarters, Hotel Stevens, Chicago, Illinois

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.

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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.

OUR COVER

MR. HAMBRECHT, State Director of Vocational Education in Wisconsin since 1921, who is now serving as President of the American Vocational Association, sends us the following message:

"Workers in vocational agricultural education are to be congratulated upon the sincerity and determination which they have evidenced in their attack upon the problems of agricultural education. Ever since the passage of the Smith-Hughes Act in 1917 there has been a continual growth in confidence in vocational agriculture on the part of farmers, as shown by the increased enrollments in all types of vocational agricultural classes.

"During the past few years, the organization of Future Farmers of America has taken a leading place in the development of leadership on the part of farm boys. Among the worthwhile activities of this organization is the National Public Speaking Contest which has greatly stimulated study and discussion of problems of farming by young men preparing for farming occupations.

"Several problems are, of course, still facing the worker in vocational agriculture: According to figures prepared by the Federal Board for Vocational Education, in 1931-32 only 13 percent of the farm boys in school in the United States were reached through all-day or day unit classes in vocational agriculture. In addition, according to the 1930 census there were over 1,300,000 farm boys of high school age out of school. Certainly, if vocational agriculture is to train the future farmers of America, an increasing amount of attention must be given to part-time schools for farm boys who have not gone to high schools and for further vocational training for the farm boys who have completed high school and are desirous of further training on the job.

"The problem of providing real vocational training for farm boys in high school by a proper combination of study and practice is another project that will continue to deserve the attention of all workers in vocational agriculture.

"The continued development of our program of vocational education is assured if the workers in all fields of the work continue to give the earnest thought and effort to their work that has been given by workers in the field of vocational agriculture during the past seventeen years."—*George P. Hambrecht.*

We thank you, Mr. Hambrecht, and pledge you continued support of the Agricultural Section of the American Vocational Association.

AGRICULTURAL EDUCATION PROGRAM
Chicago, Illinois, December 4-7, 1935

COMMITTEE ON RESEARCH SUB-SECTION

Wednesday, 9 a.m., December 4

Topic: Issues in Research Today That Involve Agricultural Education
Chairman: R. M. Stewart, Professor of Agricultural Education, Cornell University, Ithaca, New York. Other Members of Research Committee: N. E. Fitzgerald, Tennessee; H. M. Hamlin, Iowa; F. W. Lathrop, U. S. Office of Education; G. A. Schmidt, Colorado; W. F. Stewart, Ohio.

TEACHER TRAINERS SUB-SECTION

Wednesday, 2 p.m., December 4

Topic: Organizing the All-day Teaching Program
Chairman: V. G. Martin, Department of Agricultural Education, Mississippi State College, State College.
Address: "Organizing the All-day Teaching Program to Meet the Local Farming Occupational Demands," J. C. Floyd, Agricultural Education Department, Louisiana State University, Baton Rouge.
Address: "Organizing the All-day Teaching Program to Meet the Individual Farm Boy Needs," T. V. Downing, District Supervisor, Agricultural Education, Ivor, Virginia.
Discussion: "To What Extent Are These Teaching Programs Adapted to the Use of Good Principles of Teaching and Fundamental Factors Involved in Learning Processes?" Led by W. F. Stewart, Agricultural Education Department, Ohio State University, Columbus.
Discussion: "To What Extent Will These Teaching Programs Develop the Desired Abilities and Farm Practice Skills on the Part of Farm Boys?" Led by A. M. Field, Agricultural Education Department, University of Minnesota, St. Paul.

STATE SUPERVISORS SUB-SECTION

Wednesday, 2 p.m., December 4

Chairman: Julian A. McPhee, State Supervisor of Agricultural Education, San Luis Obispo, California.
"The Place of Vocational Agriculture in the National Youth Program," H. B. Swanson, Specialist in Teacher Training, Office of Education, Washington, D. C.
"Do We Face a Shortage of Teachers?" G. F. Ekstrom, State Supervisor of Agricultural Education, Iowa.
"Leadership Training for Future Farmers," Discussion leader: J. E. Border, Director of Vocational Education and Supervisor of Agricultural Education, Montana.
"Part-Time Education in Agriculture," Discussion leader: J. B. McClelland, Specialist in Part-Time and Evening Schools, Office of Education, Washington, D. C.
Additional topics suggested for discussion: Contests in the vocational agriculture program; the 90-minute period; district versus state-wide supervision; minimum salary schedules for agriculture teachers; agricultural information and aid from the U. S. D. A.

AGRICULTURAL EDUCATION

Thursday, 9 a.m., December 5

Topic: Co-operation With the College of Agriculture, the Experiment Station, and the Extension Division.
Chairman: J. E. Hill, State Supervisor of Agricultural Education, Springfield, Illinois.
Address: "Co-operative Activities With the Experiment Station," J. A. Guitteau, State Supervisor of Agricultural Education, Olimpia, Washington.
Five-Minute Presentations: "Making Teaching Material Available and Usable."
C. F. Clark, Mississippi State College
Roy A. Olney, University of West Virginia
L. E. Jackson, U. S. Department of Agriculture, Washington, D. C.
W. G. Crandall, The Clemson Agricultural College, South Carolina
E. C. Magill, Virginia Polytechnic Institute
Address: "Securing Technical Information and Personal Service from the Extension Division," H. H. Kildee, Dean, Division of Agriculture, Iowa State College, Ames, Iowa.

Thursday, 2 p.m., December 5

Topic: Out-of-School Young Farmers
Chairman: John B. McClelland, Specialist in Agricultural Education (Part-Time and Evening Schools), U. S. Office of Education.
Address: "The Virginia Out-of-School Youth Project," E. C. Magill, Professor of Agricultural Education, Virginia Polytechnic Institute, Blacksburg.
Address: "Organizations of Young Farmers and Their Achievements," G. F. Ekstrom, Supervisor Agricultural Education, Des Moines, Iowa.
Discussion.

AGRICULTURAL EDUCATION

Friday, 7:30 a.m., December 6

Breakfast—Ten-Year Teacher Trainers.
Program arranged by N. E. Fitzgerald, Chairman.

Friday, 9 a.m., December 6

Topic: Defining Our Philosophy
Chairman: H. E. Bradford, Chairman of Department of Vocational Education, University of Nebraska, Lincoln.
The "Agricultural Education Magazine," Editor Roy A. Olney of West Virginia; Business Manager W. F. Stewart of Ohio.
Address: "A Philosophy of Vocational Education in Agriculture," N. E. Fitzgerald, Professor of Agricultural Education, University of Tennessee, Knoxville.
Panel Discussion: "Our Philosophy," Chairman, C. B. Gentry, Dean, Division of Teacher Training, Connecticut State College, Storrs. Other members of panel: Don M. Orr, Oklahoma; L. R. Humphreys, Utah; H. M. Hamlin, Iowa; A. M. Field, Minnesota; A. K. Getman, New York; Sherman Dickinson, Missouri.

AGRICULTURAL EDUCATION

Saturday, 9 a.m., December 7

Topic: Charting the Future
Chairman: H. M. Hamlin, Department of Vocational Education, Iowa State College, Ames, Iowa.
Address: "A National Program in Agriculture," Charles W. Holman, Secretary, The American Institute of Co-operation, Washington, D. C.
Address: "Needed Adjustments and Direction in Vocational Agriculture," Sherman Dickinson, University of Missouri, Columbia.
Business Meeting

AGRICULTURE TEACHERS SUB-SECTION

Saturday, 9 a.m., December 7

Chairman: H. P. Erwin, Sullivan, Illinois.
"Supervised Farm Practice"
B. C. Davis, Beeville, Texas.
Robert Bretzloff, State Farmer, Tolona, Illinois.
"Leadership Development"
L. B. Hoopes, Muscatine, Iowa.
G. E. Earls, Bolivar, Missouri.
"Relationship of the Agriculture Teacher and the School Administrator"
C. L. Jordan, Principal of High School, Streator, Illinois.

Professional

Adjusting the Training Program for Teachers of Rural Youth

R. M. STEWART, Cornell University, Ithaca, New York

R. M. Stewart

TWO assumptions are made as the basis of the third installment of *Adjusting the Training Program for Teachers of Rural Youth.* (Installments I and II, May 1935 and August 1935). The first assumption is the need for understanding on the part of teachers and trainers of the nature and qualities of the tasks that rural youth do and are likely to do as young farmers, if any intelligent adjustment of training is to be made for optimum performance. The second assumption is that candidate teachers be selected as well as may be upon the basis (1) of possessing potential teaching personalities, (2) of farm experience on typical farms, and (3) of the candidate's abilities in apprenticeship training.

III.

There must be a new evaluation of the professional and technical programs designed in the training institutions to prepare students for teaching in order that the persons preparing to render these teaching services upon graduation may be spending their pre-employment training in maximally efficient modes.

If the tasks that youth face in becoming farmers require specific abilities, then it is the responsibility of farm youth and teachers to center their program of learning and teaching in the development of such specific abilities as are necessary to proficient performance in farming. If the tasks that teachers face in becoming teachers require specific abilities, then it is the responsibility of teachers and teacher-trainers to center their program of teaching and learning to teach in the development of such specific abilities as are necessary to proficient performance in teaching.

If the above two statements are true, the only sound beginning of a professional and technical program for training teachers is the discovery of the types of abilities needed by youth for farming and the types of abilities needed by teachers for teaching young farmers to farm. *What are these abilities?* Space does not permit more than a few suggestions as to the types of abilities that teacher-training programs must recognize. Before attempting to indicate the nature of these abilities, it will be helpful to mention at least three types of learning that facilitate the development of abilities.

In the first place, we must recognize the importance of native expression in all forms of individual development. Self-activity is the condition of an expanding life, —hence the condition of acquiring new abilities and expanding them through the growth processes. In their simplest forms, they are "picked up." They are abilities that come out of the necessities of native situations. The resources of an educable being for meeting the problematic situations incident to primitive and pioneer life are manifold. Such abilities, as arise out of the rugged experiences of difficult environmental situations, represent a basic condition of learning. Though this is not a new thought it is one that needs repetition. There can be no adequate teacher training that does not find its foundation in participation in the tasks for which the abilities are needed.

The second type of learning that teacher trainers (and teachers as well) must not overlook is that of profiting by worker-patterns. I mean that the crudities of specific individual performances may be continued so long that bad habits of a relatively permanent form are developed or they may be discontinued, short of success, because of lack of a suggested pattern. The tremendous influence of a suggestive pattern can hardly be overemphasized. Not all suggestive patterns are desirable patterns, —hence the use of good patterns is an economical procedure in developing abilities in people. It helps to eliminate wasteful practice and stimulates the learner to create patterns for himself of greater significance than his unassisted attempts would ever have done. The impossibility of possessing individual experience in the sum total of all experience makes the wise use of patterns of action, of feeling, and of thinking not only helpful but essential to facility in developing abilities.

But experience acquired by pick-up and by copy of others' behavior patterns, is not sufficient. There is danger in emphasizing the use of patterns if the user is not at the same time critical of the pattern. The learner then, —acting upon his own impulses in a world that calls for a great variety of elemental experiences, —can maintain an expanding horizon of developing abilities (1) by observing the behavior of others and (2) by evaluating that behavior in the light of his own experience and the behavior of others. His own personality must continue to be his point of reference. He may in such a process (1) try native experience, (2) then try what others do, feel and think that he himself may not yet have undertaken, (3) and he may pass judgment upon the character of the performance as to its propriety, economy, and significance.

Keeping these three modes of learning in mind, let us return to our former question: *What are these abilities that we should develop?* Again, I shall have to limit myself to a few points of reference:

(1) *The teacher must know and appreciate the aims and objectives of agricultural education.* Unless teacher training institutions provide for thoro-going orientation at the beginning of the training program and maintain an interpretative attitude thruout the entire pre-employment and in-service periods of training, no adequate program of training would prevail. In other words, the interpretations of principles, policies and relationships are continuously more important as time goes on and changes take place in our social and economic life. It would be disastrous to vocational agriculture for our teachers not to be able to support their convictions or their practices with sound understanding. What abilities of this type the candidate-teacher may be expected to develop in his pre-employment training should be a special concern of the teacher training institution. Bulletin number 153, published by the Federal Board of 1931, is illustrative of one aspect of this very large problem. This group of abilities falls within, what we call Principles of Education, Philosophy of Education, Problems of Education, or terms of similar connotation.

(2) *Teachers must handle and cultivate human beings.* They must, therefore, know themselves physically, mentally, and spiritually. Their only real experience is with themselves. This is their approach to an understanding of what other individuals like themselves know about human beings. Teachers may be young and relatively immature or older and more mature; in either case the teacher's knowledge is peculiar to himself. He may, if he be a young person, know something of what he himself will do, feel and think five or ten years later by what he understands of teachers five or ten years older than himself. The same principle would be valid for use in reflection on the behavior of the younger and less mature, the difference being the relative effect of experience; in the former case, the judgments are made in anticipation of experience, in the latter case, the judgments reflect past experiences more or less perfectly. The abilities necessary to an understanding of one's self at any given period and then continuously thruout life, on the one hand, and the abilities necessary to understand others, also at any given period and continuously thruout life, cannot

be acquired without giving critical attention to the question of *how we learn*. This involves a knowledge of human nature, of the resources and methodology of learning, of the variation of growth within the individual from period to period of development and of the variations among individuals due to inheritance or environmental factors. To find ways and means to acquire the abilities appropriate to this group, responsibility is placed upon the institution through Educational Psychology.

(3) *Teachers must make curriculums, courses of study, and lesson units.* An aim and a methodology call for a teaching content. It has already been pointed out in the previous discussions that the content of instruction should arise in terms of the tasks to be done both in farming itself and in the relationships of farming. Therefore, the teacher training institution must utilize the vocational and related experiences appropriate to farming. Developing abilities to acquire knowledge of vocational situations, to determine the important problems and jobs involved in farming and to discover what is difficult to do and to learn, and also to practice in the organization of the essential elements into a program similar to that found in natural settings, constitute the function of Curriculum and Course Making. This task must be done. Ready-made courses of study are seldom if ever adequate for vocational education.

(4) *The teacher must teach.* It is clear that in the last analysis, the school or class that is set up as an administrative scheme of social control, has its justification only in terms of pupil learning; therefore, the teaching act is the focusing point. Buildings, grounds, farms, libraries, apparatus, etc., as essential as they are, get their value only in terms of the promotion of learning. The teacher sets the situation for learning. It is he who is responsible for providing the opportunities for economical learning,—whether the learner gains the experience thru spontaneous reactions to the natural situations, or thru appropriate patterns that cultivate the imagination for an improved performance, or thru critical analysis of the results of both the informal and formal situations.

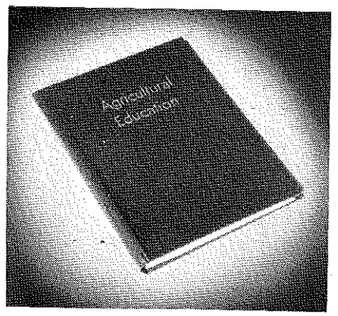
The training institution must provide the candidate teacher with the responsibility and the opportunity to observe good teaching, to teach, to criticize one's self and the pattern-teachers, to develop a philosophy of teaching, and to select, to utilize and evaluate in the total process the multitudinous techniques involved. Unless the principles and practices of good teaching are developed in intimate relationship with the specific needs of the teaching itself, teacher training as such loses most of its intrinsic values. Procedures and Techniques of Teaching are expressive of a group of many abilities for the development of which the teacher-training institution must make a great contribution.

(5) *The teacher must make studies.* In dealing with the aims and objectives of vocational education and of the appropriate general education, in understanding and cultivating human nature, in building a satisfactory content of instruction, and in learning how to teach, the modern teacher must learn to make original studies. A candidate teacher should not be told merely how to teach; he must learn to teach by teaching. To know how to teach implies also knowing how to get ready to teach. Unless opportunity is provided for studies, we shall never secure independence in teachers,—at least independence that can be trusted. He needs to make studies (1) that show society's use of aims and objectives, (2) that uncover the nature, modifiability and direction of human development, (3) that reveal the essential content of vocational agriculture as the source materials of instruction, and (4) that record the essentials of good teaching.

(6) *The teacher must evaluate his work.* Society is always evaluating and giving sanctions. Unless the teacher is equipped to evaluate the results of his teaching in terms of aims and objectives, and as well in terms of the ways and means available for realizing these, no stable basis of justifying the service can be found, and society will always be confused in assigning values. The progress of teaching as a mode of assisting learning can be measured only in terms of realized aims that have been set up for the teaching. In the sum total of the progress of teaching every method and device that may be used to facilitate teaching must have its justification in terms of outcomes. Here again is the need for special studies.

In conclusion, may it be ventured to say that these six groups, possibly types of abilities, comprehend the range of responsibilities of teacher training. Many other specific items of great enough importance to mention as specific groups, if space permitted, are implied in these six. Our responsibility is great. Our obligation to society calls for an effective and at the same time an economical program of preparing carefully selected candidates for the tremendously responsible position of teaching youth.

Agricultural Education Binders



YOU will want this attractive binder for copies of the Agricultural Education Magazine. It has post adjustment to take care of at least twenty-four issues. Obtain your copy at once. The first edition is limited to 500 copies. Order direct from the Meredith Publishing Company, Des Moines, Iowa, at $1.00 per copy prepaid.

We shall be glad to have your comments on this binder.—The Editor.

Arkansas "Modern Pioneer" Classes

C. R. WILKEY, District Supervisor, Jonesboro, Arkansas

"EDUCATION, training and vocational guidance are of major importance in obtaining economic security for the individual and the Nation. . . . What to do with regard to the army of unemployed youths continues to be one of the gravest problems of this nation. Obviously what a great majority need is a chance to work at some job, a chance to develop skills and techniques. In any program of employment they must be given their fair share of available jobs. For many, however, a training program would be of great benefit." This excerpt from the report to the President of the Committee on Economic Security tersely sets forth the unemployed youth problem which is being approached in Arkansas by organization of part-time classes. Youths numbering in the thousands have been organized by regular vocational agriculture and home economics teachers, or by FERA teachers interested in work with the younger adults. In each case the interest of the group is centered around community projects of economic and social value to the community and to the individuals. Formal study is secondary to activity in which the individual learns to perform useful tasks, and receives vocational guidance thru the group leader.

The youth groups are known as 'Modern Pioneers' for the purpose of providing them with some identity. Officers are elected with the idea of developing latent leadership. The youths will be constantly directed into permanent employment, temporarily perhaps into work on government projects, or into subsistence farming or other local enterprises. A temporary insignia has been developed and a Modern Pioneer page is being published monthly in a state farm paper. Recreational activities and the use of leisure time is also being stressed. Classes are being organized as rapidly as the available leaders can handle them. Since the Smith-Hughes Act has been in effect thousands of high school agriculture pupils and adult farmers have been pursuing regular vocational courses in Arkansas and the work is now being rapidly extended by emphasis upon the intermediate group of youths from 16 to 25 years of age pursuing less intensive courses. A recent study of several thousand former members of the Future Farmers of America in Arkansas who had completed one or more years of vocational agriculture showed only two percent unemployed while the 1930 census showed over 25 percent of the male white population over ten years of age were engaged in no gainful employment. In 1930, according to the census, there were 86,666 Arkansas boys between the ages of 16 and 21 who were not enrolled in school. The number would be approximately doubled by adding the group from 21 to 25 and quadrupled by taking the girls into consideration.

Farm boys of this age formerly had an opportunity to climb the tenant ladder to land ownership, but this opportunity has been gradually disappearing for several decades. The proportion of Arkansas farms operated by tenants increased progressively from 45.5 percent in 1900 to 63.0 percent in 1930, and during the same period the proportion of farms mortgaged increased from 13.6 percent to 37.9 percent. In contrast to these disturbing figures sixty-five percent of the Arkansas farmers who have pursued high school agriculture courses during the past decade have advanced beyond the laborer and share cropped rungs of the tenant ladder with forty percent of them either full owners or partners in the farm business.

Calico Rock Chapter No. 1 of the Modern Pioneers sponsored by V. H. Wohlford, Arkansas master teacher of 1934, has forty members engaged in several community projects in co-operation with state and federal agencies as follows: establishment of game preserve, rehabilitation work center, paint-up campaign, a community building, soil erosion control, fair ground improvement, and school ground beautification. In the same locality two other pioneer chapters have been organized by FERA instructors engaged in adult education work. Mr. Wohlford teaches three all-day agriculture classes regularly in the high school, and conducts three adult evening school classes numbering 139 farmers during the slack farming season. One of the evening classes is composed of approximately 40 men who migrated with their families from urban centers to take up the new vocation of farming. Under direction of the agriculture instructor they are avoiding many costly mistakes and are becoming self sustaining and independent in their new situation.

At Centreville in Faulkner County, S. D. Mitchell has a pioneer group developing a work center in co-operation with the rural resettlement division. Following a preliminary survey to determine community needs the young men will manufacture chairs and other needed home furnishings and farm conveniences, while the 'pioneer' girls will be directed in making rugs, clothing, and in food preservation work by Miss Ruth Powell, county home economics supervisor.

At Trumann vocational instructor Jim Pickren is leading the youths in keeping farm records in co-operation with the Agricultural Adjustment Administration in addition to providing recreational and vocational guidance. At Imboden W. C. McCollum has the young men learning to construct farm buildings and homes from cobblestone which abounds in that locality. In eastern Craighead County a number of Modern Pioneer chapters will hold community fairs this fall and exhibit the best products of field, shop, and home at the Buffalo Island Fair in charge of Marion Adams, Smith-Hughes instructor. In every case vocational guidance will be given, and members will be directed into useful employment, preferably in the home community and on the farms. Contacts will be maintained with governmental and other employment agencies for placement of those who cannot find employment in local enterprise.

"TO help folks is a fine thing; to help folks help themselves is a finer thing; to help folks who cannot help themselves is the very finest of all."

Publicity and the Vocational Program

R. G. HARRELL, Vocational Agriculture Instructor, Napoleon, Indiana

ANY work that is a public service and is dependent upon the public for its support and promotion must, at some time or other, give an accounting of itself. Whether the verdict given at this time is one of approval or condemnation depends to a large extent upon the amount of the time that the program has been before the public eye in a favorable light. It behooves workers in public service, then, to get as much of this favorable publicity as possible. Perhaps the best way that one can make himself felt in a community is to be serviceable and of such value that his removal would be a calamity. This is helped to a very considerable extent, however, if news articles make him known over a greater territory that can be reached by personal services rendered.

The program of vocational agriculture is dependent upon the approval of the public. Its success is mirrored by the number of satisfied communities having the vocational work and the very few failures that have occurred. The publicity that has attended these successes has been little in comparison to the work accomplished. Because of the various agencies that are springing up to assist in vocational guidance it becomes not only a necessity but a very great necessity that the public is informed as to the progress and the advancement that is being made in vocational work in the schools.

The first step in accomplishing the desired result is to make the acquaintance of the editor of your local paper. See that he understands the principles and the ideals of vocational agriculture; inform him of the advantages that it gives to the community. In other words, sell him on vocational agriculture. If that is accomplished half the battle is won. Arrange with him to print each week a column or a box containing news worked out by your class. Give it a distinctive title and a prominent place. Credit the boy that has been responsible for that issue by using a byline. The editor will see that since the articles are to be written by local boys greater interest will be stimulated in his paper than before. Parental pride will be stimulated, school pride will be stimulated, community pride will be stimulated, and through all these—stimulation to the program in which you are most vitally interested. People will be aware of the fact that your department exists, not as a dormant part of a conventional school curriculum but as a vitally important part of the present and future of the community.

How are these articles to be prepared? Where does the material originate? How does it help the boy? Will the community react favorably to such a plan? What is the attitude of school officials?

A Local Plan

The articles are prepared by the boys. It will be found that it is not hard to get them to write the article or take the responsibility for the preparation of the article. The psychology of seeing their name in print in the paper and of realizing that others will also see it takes care of that. At the first of the year a calendar for the year is made out. A reproduction of a portion of it follows:

Articles for the Paper

NAME	Date Due	SUBJECT	Date of Issue
R. Behlmer	9–19–34	Portable Seed Cleaners	9–27–34
R. Lehman	9–26–34	Agricultural Census	10–4–34
P. Hertenstein	10–3–34	Farm Account Books	10–11–34

Each boy was to submit the principal portion of his article a week before the completed article was due. It was then looked over for mistakes in grammar, etc., and also as to authenticity of the article. It was sent to the paper several days before the day of issue. The articles usually consist of from eight to fifteen column inches when set up in the paper and may be contributions from several boys or most usually an article or articles by the boy responsible for that issue. To illustrate the interest the boys take—one boy was confined with an attack of the "flu" and yet wrote his article and mailed it to the school in order that it would be in the paper.

The origin of the articles is indeterminate. Periodicals, bulletins, reference books, class work, extension talks, all contribute their share. Any authentic source and any subject that will be of interest to the community are the principal criteria.

A certain amount of competitive spirit is awakened in such a system and the boys widen their reading and enlarge their scope of understanding in an attempt to create a good article. The subject matter of the articles become required work for the class. Thus the scope of the planned course is widened and an interesting amount of variety appears.

Concerning the community reaction—it can best be given by saying that farmers turn to the vocational agriculture column after the front page is scanned. There is, obviously, no reason to question the parental reactions; they like to see the boy in print.

School officials are glad to see the school given such good publicity. It reflects indirectly to their sagacity and wisdom and elevates the school to a little higher level than the school that has no such plan.

Besides the routine articles that appear under the distinctive box head each week every occasion that merits news space, especially concerning some public service being rendered by the vocational class or teachers and all pictures having definite news value should be given to the local press. The vocational teacher should give a definite place in his program of work for the year to publicity.

It is well for the vocational teacher to realize that through publicity, by means of the local press or otherwise, he is enabled to render a greater service to the boy, to the community, to the vocational program, and to himself. Honest dues for services rendered is all that is asked but it should be realized that not always are the laurels heaped upon the head that deserves them.

Making it possible for the public to see, appreciate, and understand your program will assist materially in making your program a success.

Methods

Using Preliminary Tests with Individual Instruction

J. E. GIVENS, Instructor in Agriculture, Buchanan, Virginia

THE trend in teaching vocational agriculture, especially in our state, is toward a system of individualized instruction.

In general, pupils taught by this method study only those jobs which have a definite relation to their supervised practice program or to home farm conditions. An occasional informative job may be taught.

In order to prepare the study calendar for the boy's guidance, the enterprises are analyzed and the boy is charged with selecting those jobs for study in which he feels he is the least proficient. These jobs are the study calendar for the year. Farm shop and supplementary farm jobs are included.

For some time I have found in pupils carrying agriculture III and IV, and to some extent in the basic years, a tendency toward duplication in studying the jobs selected for the teaching calendar. To combat this unprofitable duplication, I have evolved a series of preliminary tests designed to give the instructor an insight as to the qualifications of the boy for carrying out the job in question on the home farm according to improved practices.

By preliminary test, I mean a test is given before the study of the job begins. I am, of course, aware that no written test is an accurate measure for testing, either preliminary or final. This is especially true in the case of operative jobs or where skills are involved.

I justify the giving of such tests by the following facts:

Certain types of boys will study the same job year after year, when in reality they are already prepared on the job in question and need instead to work on some other job in the enterprise.

Seniors need to be tested on jobs completed in former years in which they may have at one time been qualified but which, due to changing practices or lack of application, they are now in need of studying again.

Preliminary tests tend to care for that pupil who brings the following attitude to class—"I know all about this job; why do I have to study it?"

Preliminary tests are a most excellent method of motivation.

The test may be either written or oral. Where a small number of boys are being taught, the oral test is the most efficient. It gives the instructor a chance to determine exactly what the pupil knows. Where large numbers are being taught, the test must necessarily be written.

I have found that the most efficient tests are characterized by the following points:

The questions should be designed to determine the pupil's knowledge of the terminology in relation to the job.

The test should require the pupil to

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Participation Training in Evening School Methods for Teachers in Service

J. C. DYKES, Professor of Agricultural Education, Texas A. and M. College

J. C. Dykes

PARTICIPATION training in evening school work was a part of the regular preemployment training of the senior agricultural education students at Texas A. & M. College in 1929-30. In the summer of 1930 a group of twenty experienced teachers of vocational agriculture were enrolled for a participation training course in evening school methods at the college. These men, who were divided into five groups, organized and taught five evening schools in Brazos County. This course was repeated in the summer of 1931 for a different group of experienced teachers and in the summer of 1932 for a small group of teachers. In the meantime, in the fall of 1930 the first graduate course in extension was organized at Sherman, Texas, with eight teachers enrolled. Since that time four additional classes in extension have been completed and the extension plan proved to be so much more satisfactory that the participation course in evening school methods was eliminated from the summer school curriculum and is now taught only in extension.

The Texas A. & M. College Plan:

1. A center is selected at which to hold the class that:
   a. Is a convenient meeting place for a group of seven to twelve vocational agriculture teachers in the area.
   b. Is easy to reach by either railroad or car from the college.
   c. May or may not be a vocational agriculture center. (Of the five centers used to date, three have been vocational agriculture schools.)
2. A meeting is called at the selected center of the vocational agriculture teachers in the area at which:
   a. The plan of handling the class is explained.
   b. The teachers decide whether or not to have an extension class.
   c. The teachers who want to take the course register for two hours graduate credit. The course fee is $10.
   d. The teachers decide the dates on which the class will meet and the hour and length of the meetings. (Thirty-six hours of class work required. Two plans have been used successfully: (1) Four hour meetings on Saturday morning, 9 a.m. to 1 p.m., for 9 meetings held during the 18 week term, or (2) four hour night meetings, 5 p.m. to 7 p.m. (supper 7 p.m. to 7:45 p.m.), and 7:45 p.m. to 9:45 p.m., for 9 meetings held during the 18 week term.)
3. The instruction is based on the evening school problems in the particular area as determined by:
   a. Previous experience of the teachers enrolled in teaching evening school work in the area.
   b. An analysis made of the needs of the area for certain specific types of evening school instruction (based on experiences of teachers enrolled in course).
   c. Observation and supervision visits made by the instructor to the schools of the area.

COMPARISON OF TWO PLANS

Extension Plan	*Summer School Plan*
1. Teacher has sole responsibility of organizing class.	1. A group of two to five teachers co-operate in organizing class.
2. Teacher holds 10 to 15 evening school meetings.	2. Each teacher holds two or three meetings.
3. Complete follow-up of instruction is possible.	3. Follow-up is very incomplete as teachers are in summer school only six weeks.
4. Work is with farmers of community or trade territory who will attend other evening schools held by teacher.	4. Teachers cannot become even fairly well acquainted with farmers and their problems in six weeks.
5. Problems are taught on seasonal basis.	5. Ten or twelve meetings are crowded into a six weeks period.
6. Working conditions are natural.	6. Working conditions are more or less artificial (attendance relatively small, etc.).
	7. Summer evening schools in Brazos County communities interfered with participation schools held by agricultural trainees during long session.

4. Each teacher enrolled is required to teach one complete evening school in his home community or at a rural school in his trade territory. (In one or two cases teachers were permitted to do their evening school practice teaching in an evening school organized by another teacher as conditions in their own communities did not permit organizing an evening school.)
   a. Teachers enrolled in course visit the meetings held by other teachers and analyze procedures immediately following the completion of the lessons.
   b. The instructor supervises the teaching of one complete lesson (usually more) by each teacher enrolled.
   c. The instructor spends at least one afternoon with each teacher in visiting the farmers of his evening school community to do both preliminary and follow-up work.
   d. The instructor checks lesson plans, reports to be made to the state office, and news stories written about the participation evening school.

It is rather difficult to try to estimate the value of a course, particularly insofar as improvements in methods of teaching are concerned. Therefore in the summary tables only one objective measuring factor, the number of evening schools and part-time classes taught, is given.

Summary

Group	*No. Teachers*
1—Fall 1930 at Sherman, Texas	8
2—Spring 1932 at Taylor, Texas	8
3—Summer 1932 at Stephenville, Texas	10
4—Spring 1933 at Corsicana, Texas	7
5—Fall 1933 at Crockett, Texas	9
Total completing evening school courses in extension	42

At the present time 38 of the 42 teachers are still in vocational service in this state.

Evening School and Part-Time Programs of Extension Course Trained Teachers

Year	1930–31	1931–32	1932–33	1933–34	1934–35*
Number of teachers	8	15	31	39	38
Number evening and part-time classes	13	23	49	68	69
Average number per teacher	1.62	1.53	1.58	1.74	1.81*

*Records available for only first six months of this vocational agricultural year, 1934–35.

Evening School and Part-Time Programs Before and After Taking Training Course in Extension

	Number of Classes	Number of Teachers	Av. No. per Teacher
1. Evening school and part-time participation year before course	39	41	0.95
2. Evening school and part time participation course year	73	41	1.78
3. Evening school and part-time participation year following course	61	40	*1.52
4. Evening school and part-time participation second year following course	51	30	†1.70
5. Evening school and part-time participation third year following course	37	13	‡2.38

*1934–35 (½ year only) was used for 1 group (9 teachers).
†1934–35 (½ year only) was used for 2 groups (16 teachers)
‡1934–35 (½ year only) was used for 1 group (6 teachers)

The Value of Experimental Plots in Teaching Agriculture

NELVIN HAUGLAND, Agriculture Instructor, Iron, Minnesota

ONE of the finest ways of correlating teaching with practical experience is thru the use of experimental plots. These plots are conducted in co-operation with the experiment station and are planted on various farms thruout the community. In this particular area, the growing of grain variety trial plots is especially important. Each year the experiment station provides seed for seventeen or eighteen different plots, there being samples of the new varieties of oats, wheat, barley and rye together with the old established varieties.

A farm and project tour is conducted during the summer which includes a visit to the experimental plots at the time when they are ready to be harvested. This gives the farmers and pupils an opportunity to see the difference in results obtained. Samples of the different varieties are collected and displayed at the local community fair where the people have an opportunity to view them carefully. Samples are also collected for use in connection with identification of crops in class work and as an aid in teaching their chief characteristics.

The plots are harvested when ripe and sent to the experiment station where yields are determined. Reports are printed and copies sent to the various schools and these reports are studied very carefully in evening school, part-time classes and by all-day pupils.

Similar work is carried on with potato varieties, grasses, legumes, peas, beans, and emergency crops giving the pupils a very practical lesson which is generally put into practice.

We go one step further in actually purchasing seed of the leading varieties, through a pooled order, for the farmers. Large areas of alfalfa, reed canary grass, and leading varieties of small grains have been established this way and remarkable results achieved. Carrying teaching thru to practical application by having the farmers and pupils co-operate in purchasing small quantities of recommended varieties for trial justifies the existence of the department and makes it an integral part of the farming of the community.

Playing the Market

L. J. HAYDEN, New Park, Pennsylvania

FOR several years teachers of agriculture have been attacking the problem of teaching agricultural marketing. I have heard the problem discussed at a number of conferences, and three years ago I tried a little stunt to motivate interest in the principles of marketing. It overcame so well the problem of presenting an abstract and almost foreign subject to boys of high school age that I have used it ever since.

The plan is briefly this: Before the end of the first two weeks of school in the fall, it is announced to the class that we are to begin a contest among all of us to determine which one can make the best money on the wheat market. Paper profits, of course. Any other commodity that is regularly quoted upon the open market might be chosen instead of wheat. Beginning the following week, each pupil is to receive a consignment of 5,000 bushels of wheat at the closing price for a certain day's quotation. Each week thereafter for the next 30 weeks, each one will receive the same amount at whatever price the market quoted. When a boy sells wheat, he must pay one-quarter of a cent per bushel for the amount as a storage charge. The boys can sell on any day they wish, providing it is the last quoted price available. That is, they can not wait until the price has dropped and then say they wish to sell at last week's price.

These are the only rules, except that when a consignment is sold the pupil merely has to hand in a slip to the teacher giving the number of bushels sold, the date, and the price. When the boys begin to ask when they are to know when to sell, the teacher merely produces sources of market information and explains that this information will be available to all at a designated place. The object of the "game" is to see who can make the most paper profits from his activities.

The boys immediately become interested. They ask their elders what they think of the future prospects, they read the market news, they hunt through the government reports. About the second or third week a boy asks what "hedging" is, and this gives the teacher a fine opening to teach that little market trick. Then someone has heard about "futures". And so as the boys read these everyday comments in the newspapers their market terminology is gradually built up until they are familiar with the entire process.

Interest lags but little during the thirty weeks, and toward the end of the time the excitement grows and each one is checking up on the standing of others and trying to outguess the rest. This plan does not encourage speculation. In fact, I firmly believe that anyone, boy or man, who conducts this game for one season will be vastly wiser at the end. More times than not these boys lose money because they think they will accumulate vast profits. Many have commented that they will never attempt any such practice.

As a result of the contest, the boys learn the market procedure of the commodity in such a manner that they do not forget it.

Supervised Practice

Supervised Practice Activities

G. A. SCHMIDT, Agricultural College, Fort Collins, Colorado

IF ANYONE were to ask a teacher of vocational agriculture—"How many distinct activities are there in supervised farm practice in which a successful teacher of vocational agriculture engages?" he would undoubtedly receive a great variety of answers. It is also doubtful whether any of the answers received would come very close to the number of such activities actually engaged in by teachers of vocational agriculture.

Dr. W. T. Stanton, Western Regional Agent in Agriculture for the United States Office of Education, has made a study of training teachers in supervised farm practice methods. In this study Dr. Spanton listed 77 distinct and separate activities arising in supervised farm practice in which successful teachers of vocational agriculture engage. Undoubtedly the following list of activities will in various ways be of considerable interest and value to all teachers of vocational agriculture. It should at least serve as a check list which any teacher might use to measure his present procedure and to discover ways in which he may improve this most important phase of the agricultural program in his school. The activities are as follows:

1. Making studies of home farms where pupils live, to secure first-hand knowledge of specific enterprises, farm practices, soil types, and farm equipment.
2. Becoming personally acquainted with the pupils and their parents.
3. Having a conference with parents at the home farm to explain supervised practice and to determine the relative influence of father or mother on the boy's supervised practice program.
4. Having supervised practice thoroly discussed at informal group meetings with parents at father-and-son banquets, to secure co-operation of parents.
5. Determining financial resources, ability, intelligence, and willingness of parents to back pupils in their projects.
6. Discovering personal interests, preferences, hobbies, likes and dislikes of pupils through personal conference.
7. Presenting facts to the class showing financial returns to former pupils who have had successful projects, in order to secure interest in supervised practice.
8. Showing pupils the effect of improved practices on the efficiency of the farm business, in order to secure interest.
9. Showing pupils the opportunity afforded through supervised practice for growing into the farming business.
10. Helping pupils select projects in the field of their major interests.
11. Helping pupils select projects which have reasonable chances of being successfully adapted to home farm conditions.
12. Securing home projects of sufficient size or scope to provide opportunity for developing initiative and for employing efficient production methods, managerial responsibility, and a complete natural cycle of activities.
13. Giving consideration to the age and physical condition of pupils.
14. Seeing to it that projects provide new and varied experiences.
15. Seeing to it that projects provide an appreciable business risk.
16. Securing projects that provide opportunity for developing doing ability on an occupational standard.
17. Assisting pupils in making and utilizing analyses of specific supervised practice enterprises.
18. Helping pupils to make an economic study of their supervised practice enterprises.
19. Having pupils give consideration to risks caused by weather, insects, and disease.
20. Assisting pupils to determine their facilities for satisfactorily conducting a supervised practice enterprise.
21. Assisting pupils in selecting supplementary supervised practice activities.
22. Assisting pupils in setting up definite financial goals by years for the entire period they expect to be enrolled for instruction in vocational agriculture.
23. Securing continuation projects with increased scope and managerial responsibility for each succeeding year.
24. Assisting each pupil to set up a definite farming goal.
25. Determining qualitative standards of proficiency for various project enterprises: (a) quality of product, (b) quality of work done.
26. Determining quantitative standards of proficiency for various project enterprises: (a) size or scope, (b) duration through a natural cycle of production.
27. Determining production standards of proficiency for various project enterprises—yields per acre or per animal.
28. Determining labor standards of proficiency for various project enterprises—percentage of labor performed by the boy; efficiency of man, horse, and machine labor.
29. Determining financial standards of proficiency for various project enterprises—amount of profit to be reasonably expected from the enterprise.
30. Securing contributory supervised farm practice enterprises.
31. Determining the supervised practice enterprises before building the content of the course of study.
32. Arranging class instruction according to seasonal sequence requirements of the projects.
33. Basing certain parts of the class instruction on project problems of the pupils.
34. Providing for individual instruction.
35. Training pupils how to make financial and business arrangements for conducting home projects.
36. Training pupils how to make businesslike estimates of cost factors as well as probable returns for each enterprise.
37. Helping pupils secure the best possible ownership or share arrangements.
38. Teaching pupils the meaning, place, value, and use to be made of a project plan in order to secure interest.
39. Showing pupils one or more good project plans to be used as models for them to follow in making their own plans.
40. Demonstrating on one or more jobs how to make a project plan.
41. Determining evaluation standards for approval of project plans.
42. Explaining to pupils how project records and accounts may be used for making comparative studies in determining cost of production and labor income on similar project enterprises.
43. Teaching pupils how to use cost-account data in figuring efficiency factors.
44. Showing pupils how their project records and accounts may be used for local publicity purposes.
45. Having pupils review and analyze completed project record books of other pupils, in order to teach them how to keep and analyze their own records.
46. Giving practice in keeping and analyzing project records by means of practice books.
47. Helping pupils to interpret and follow instructions in their project record books.
48. Assisting pupils through individual instruction while in school and during project supervisory trips in keeping records of their own project.
49. Having all project record books kept in the school or brought to class at least once a week for posting while school is in session.
50. Having pupils figure efficiency factors of their own project records after projects have been completed.
51. Supervising projects—inspecting for general condition and improved practices.
52. Supervising projects—teaching on the job or giving definite recommendations and suggestions of changed or improved practices to be followed by the pupil where advisable.
53. Anticipating seasonal difficulties and making practical suggestions in advance as to the best methods of coping with them.
54. Checking up on necessary entries in the record book at the time of each supervisory visit, and insisting that it be brought up to date before the teacher leaves the project.
55. Keeping notes on condition of the project at the time of each visit.
56. Giving encouragement and inspiration while supervising projects.
57. Making contacts with parents when supervising projects.
58. Developing pride in workmanship while supervising projects.
59. Conducting project tours for vocational pupils to inspect projects of fellow class members and projects conducted by pupils in neighboring schools.
60. Conducting project tours composed of local business men, farmers,

(Continued on page 80)

Long-Time Program Planning

C. D. LUTTRELL, Instructor, Vocational Agriculture, Georgetown, Ohio

IT IS my opinion that long-time planning is as important to vocational agriculture as it is to individual farmers. Our thinking for many years has been directed toward long term leases for farm lands in order that the occupant of that land might have more time to apply those improved practices to production that the short term occupant could not economically do. I believe that the same condition is applicable to vocational project planning, and to that end I have worked out a method of long time project planning which is now in operation in the Georgetown Department. Altho the plan is young and perhaps numerous revisions will be necessary before we realize the fullest benefit from it, I can see many improvements over our old system of annual planning for projects which I did not see before we started the long-time planning program. I shall not have time to discuss the merits of this type of planning, but I hope to give you clearly and briefly the steps followed in the set-up of the plan.

In August I asked my superintendent to ride with me for two weeks. During this time we visited all prospective pupils and their parents, discussing the phases of the agriculture program and reaching a more or less definite understanding with them relative to the boy and his high school preparation. The relation of projects to the agricultural studies was made plain to the parent as well as to the boy. A tour of the best project programs, especially State Farmers of the department, seemed valuable for incoming pupils and on registration day when all pupils could easily be assembled the tour was made. The boys visited explained their programs and discussed their objectives. This is especially helpful in securing enrollment.

I made it my business to be present at the time of enrollment and found that two boys had been missed. By being present I had time to discuss the agriculture program with them before they registered.

After the opening of school I held personal conferences with the boys at which time I explained more fully the advantages of the vocational agriculture course. I referred to and reviewed the successful programs of members of the department, and opened the field of accomplishment to them, such as having a definite financial goal, and becoming a State or American Farmer.

Contrary perhaps to general opinion of vocational teachers and supervisors, I do not find it advisable to force pupils into early project elections in long time planning. I find that when elections are made quickly and without a good deal of thinking and planning, many changes are necessary and in some cases the whole plan must be junked and a new one evolved from the wreckage. Such is especially true if the boy does not feel that the fundamentals of agriculture was discussed and emphasized in the personal contacts. Of course considerable leeway is necessary for changes and alterations, but if sound economic and business principles are the basis of guidance in his agricultural program, the boy will simply need to add the foundation already laid. Each boy is a separate and definite problem. A study of his home conditions, financial ability, and the degree of success on his home farm will be of considerable help to the teacher in planning his long time project program. My advice would be to take all the time necessary but have the plan before the boy and in your files as soon as possible after enrollment.

Two long time plans of boys in the Georgetown Department are submitted for your study and criticism, and may be used as a basis for constructing your own program.

Pupil—T. M. Gardner, Rank—Junior, Georgetown High

GRADE	9	10
PROJECTS	2 acres certified Clarage corn 1 acre Kelley tobacco 1 purebred Poland China sow Orchard management 24 trees	12 acres certified Clarage corn ½ acre Kelley tobacco 1 purebred Poland China sow 1 purebred Poland China boar Orchard management 24 trees 2 acres rotation (corn) Farm accounts
COMPLETED	All	All
GOALS	Purebred swine herd	Certified oats, corn and wheat
LABOR INCOME	$235.60	$422.43
GRADE	11	12
PROJECTS	14 acres certified Clarage corn ½ acre Kelley tobacco 3 purebred sows 1 purebred boar Orchard management 24 trees 2 acres rotation (oats) Farm accounts ½ acre lespedeza 4 acres wheat (certified Fulhio)	20 acres certified Clarage corn 1 acre Kelley tobacco 3 purebred sows 2 purebred boars Orchard management 24 trees 2 acres rotation (clover) Farm accounts ½ acre lespedeza 4 acres clover 16 acres wheat (certified Fulhio)
COMPLETED		
GOALS	Degree of State Farmer	$800.00
LABOR INCOME.		

LONG-TIME PROJECT PLAN

Pupil—Charles W. Snider, Rank 10, School—Georgetown High

GRADE	9	10
PROJECTS	10 acres corn 1 acre Canadian tobacco 2 grade sows 15 grade ewes Orchard management 20 trees Farm accounts	12 acres hybrid corn 1 acre Canadian tobacco 1 purebred spotted Poland China sow 12 grade ewes Orchard management 20 trees Farm accounts 5 cows 150 hens 3 acres soybeans
COMPLETED	All	
GOALS	$1500	Purebred swine herd Purebred sheep flock
LABOR INCOME		
GRADE	11	12
PROJECTS	15 acres hybrid corn 1 acre Canadian tobacco 2 purebred sows 1 herd purebred boar 10 grade, 5 purebred ewes 1 purebred ram Orchard management 20 trees Farm accounts 5 dairy cows 300 baby chicks 15 acres certified Fulhio wheat	20 acres hybrid corn 1 acre Canadian tobacco 2 purebred sows 1 herd purebred boar 10 purebred ewes 1 purebred ram Orchard management 20 trees Farm accounts 6 dairy cows 500 baby chicks 20 acres certified Fulhio wheat
COMPLETED		
GOALS	State Farmer degree American Farmer Degree	Scholastic average 90 Win in Junior Fair
LABOR INCOME		

PART TIME Farmer Classes EVENING

Adult Education at Fairview High School

O. J. SEYMOUR, Teacher of Agriculture,
Camden, Arkansas

DURING the past four years considerable emphasis has been placed upon adult education by the vocational departments of Fairview High School. This work consists of evening school classes conducted for the women of the community by the home economics teacher and for the men by the vocational agriculture teacher, and of other activities which are largely the outgrowth of the work done in these classes.

What We Are Trying to Do for Our Farmers

During the past four years the vocational agriculture department has made a strenuous effort thru evening school work and its related activities to maintain the morale of our farmers, to raise their standard of living, to improve their economic status, and to develop a worth-while community program.

A number of activities have been used to help maintain the morale of our farmers. We have endeavored to keep them thinking and doing something new or different. We have found that if we can get farmers together and give them an opportunity to visit and to exchange ideas they will leave a meeting in much better spirits than when they came.

Ten evening schools have been conducted with an average enrollment of more than 40 per school. More than 150 meetings have been held with an attendance running from a few on nights when the weather was very unfavorable to 100 farmers on other nights.

The activities of our chapter of Future Farmers of America have kept the farmers interested in the program of work of the agriculture department of the school. Each year the F. F. A. boys sponsor a Father and Son Barbecue to which their fathers and all others who attend evening school classes are invited. This year 225 attended the barbecue and consumed seven hogs, two goats, one sheep, and one hundred pounds of beef along with twenty-five home made cakes, ten gallons of pickles, a barrel of coffee, etc.

Our annual two-day community fair held in October brings our people together at harvest time. Some of the features of the fair are: Special farm and home displays and best feed displays. Much interest is manifested in these displays and competition is very keen. Many of our farmers plan for the fair as they plant their spring crops. The best exhibit of field peas this year contained pint jars of twelve varieties grown on the same farm. A basket dinner and free barbecue is held on the first day of the fair. Games, races, and other contests are held thruout the day. A terrapin race is featured for the children. This year 100 terrapins were entered. The activities of the day are climaxed by a baseball game between the present and future farmers. More than $400.00 in premiums were given this year. These were donated by the business men of Camden and other friends of the fair. Everything at the fair was free.

A shop school is held two nights per week for about twenty nights for our adult farmers. In this school farmers may repair farm tools or make anything they choose. The shop is available to the farmers of the community at any time during the day they may want to use it. Our shop, being a three-room building, equipped with two forges, a number of electrically driven machines, and an adequate supply of hand tools makes this possible. Our farmers take much interest in spending what you might term leisure time in this way.

An effort has been made to raise the standard of living of our farmers through sponsoring a real and effective live-at-home program. Cropping systems have been planned that would meet the needs of the individual family in the matter of food, feed, cash, and soil improvement crops. A number of home conveniences, such as kitchen sinks, screen windows, and doors have been made in the shop and installed in the homes. Fifty folding ironing boards have been made in the shop for the homes of the community.

Our farmers have been urged to repair their farm buildings and fences and gates about the homstead, and to beautify the premises. At this time extensive terracing and landscaping of the school grounds thru a FERA project is under way with the hope that this work will be reflected in more beautiful home surroundings in the community.

Much has been attempted to improve the economic conditions of our people. We have attempted to find those crops which were most suitable for the different farmers and which they could produce at a profit. At the evening school meetings diversification of crops and the growing of soil improvement crops have been urged. The best method for growing crops, especially truck crops, in the community has been worked out by the conference method at the evening school and this material mimeographed and handed back to the farmers who attended.

A truck-growers association was formed and incorporated. Irish potato seed, cantaloupe seed, cabbage, and tomato plants are bought co-operatively thru this organization at a substantial saving to the farmers. A special fertilizer formula for truck crops was worked out at evening school and mixed for the members of the association by a local fertilizer company giving the farmers the kind of fertilizer they needed at a reduced cost.

About fifty cars of potatoes have already been shipped where none were shipped before. The cantaloupe acreage has been increased from about ten to fifty acres and satisfactory markets found for the increased crop. The sweet potato acreage has been more than doubled, and a number of carloads have been marketed. This year 100 acres of tomatoes are being grown for green wrap shipment and for canning purposes. The Fairview Truck Growers, Inc. have a market outlet for all truck crops grown through the South Arkansas Truck Growers, Inc.

The truck-growers organization has been active in helping provide adequate finances of our farmers thru the Camden Production Credit Association and other lending agencies. This year finances for about seventy acres of tomatoes was provided thru business men of Camden.

Fairview Dairy Feed and Fairview Laying Mash formulas were worked out at evening school and these two products were put on the market by a local milling company at a great saving to our farmers of Camden trade territory.

Terrace lines have been run for about 1500 acres of land as a part of our land conservation program. Several thousand hens have been culled, much livestock has been treated for diseases, several hundred head of hogs have been vaccinated for cholera, and a large number of orchards have been pruned and sprayed by the department.

Our Work With the Women of the Community

The following brief summary outlines some of the activities of the home economics department.

Vocational home economics has been changed to mean, not just class room teaching—given to high school girls, but it includes adult education also. In enlarging our sphere of home economics work we have included giving instruction to girls out of school and married women who have never had the opportunity to study homemaking as it is now taught in high school. Most of these women realize the handicaps which are a result of lack of training and are anxious to learn improved methods of homemaking—even though it is a little belated.

We have used several methods in reaching as many homes as possible in order to do the most good in the community. We make contacts with the mothers and the homes through the girls enrolled in home economics courses when they carry out their home practice and home project work; which means applying home making principles taught in school to their own home conditions. There are very few mothers who are not interested in their daughters learning to be good homemakers, and in the meantime the mothers may benefit from work done at home by the girls. Getting both parents and children interested in their homes does much toward improving living conditions and in increasing the happiness of the family group.

For the past two years we have held a Mother and Daughter banquet, with all girls in high school who have had or who are taking home economics as hostesses and their mothers as their guests. We think this is one of the best ways to get acquainted with the mothers and to make them feel that the home economics department belongs to them and is for their use. The food is prepared and served by their own daughters in the home economics cottage. Eighty attended the banquet this year.

Our participation in the community fair, an annual event for the past four years, has done much to create community spirit and to improve standards in all homes where the families have participated.

Besides these community affairs, it is understood that any person in the community who needs help on any problem of homemaking is free to come to the department for advice and assistance. And since our women have become thoroughly familiar with what the department is attempting to do for them, they do not hesitate to use the service available.

The formal class room instruction for women has been done through the adult courses offered in homemaking. Ten such courses have been offered in the past four years. The courses have been: food and nutrition, clothing selection, clothing construction, care of clothing, household management, child training and development, and meal planning, etc. This year a short course was offered in home hygiene and care of the sick in co-operation with the county health department. We have been able to reach more than 200 women through these classes.

We have been trying to break down prejudice and social castes existing in our community by getting our people together. When people really come to know each other and to understand each other's problems a better understanding is brought about and former prejudices disappear. Our co-operative undertakings have helped to develop common interests among our people. Improvement of general school conditions and beautification of school grounds along with other varied activities have done much toward developing a community pride which is beginning to crystallize into a unified community program.

Vocational Education and Depression

VOCATIONAL education is the greatest immediate means of aiding depression and restoring confidence which the educational world has. We are doing our best through education to prepare the children of the Nation for the right kind of attitude toward the government and toward work, but vocational education is immediately preparing thousands of people for new jobs and for new situations and adjusting them into a new order of life.—Willis A. Sutton, Former President, National Education Association.

How We Organized Our Farmers' Evening Classes

HAROLD PARK, County Adviser, Carlisle,
Pennsylvania

IN THE early days of vocational education in this county, two part-time classes were held each year in co-operation with the extension office. These classes or courses were held during the day for five days, two sessions each day. For each session a speaker was secured who would lecture on some phase of farm work and give an opportunity for questions. This type of organization gradually changed until about half the speakers were local men who had been successful in some particular field of farm work, but the plan of covering several fields of work during the course was continued, as for example, dairying, poultry, farm crops and swine, each being covered in a half day or a day.

Later two additional vocational agriculture departments were opened in the county and somewhat simultaneously the three teachers and the county supervisor got the idea of a co-operative plan of organizing evening classes. Instead of having a lecture course at some center in the county, it was decided that each of the four teachers should conduct a class in his own school room, the four classes to run simultaneously, and all using the same outline.

Early in the fall of 1931 the four teachers met and discussed the general plan.

It was decided that the first course which was to continue one night a week for ten weeks, would begin immediately after the state farm product show in January which would make it possible to end the last of March before farm work became pressing. The time was set at from 7:30 to 9:00 on Monday evening and it was agreed that we would start on time if anyone at all was present and end on time no matter how great the interest might be and regardless of the point reached in the discussion. Each class was to be treated as a day time class with the idea of having as much discussion as possible and as little lecturing as possible. The teacher was to act as a guide, keeping the discussion moving in the right direction, giving information where needed, putting on the blackboard all the points taken up, asking leading questions, and in general "managing the show."

The subject selected for the first year was called "Farm Management." We selected this because it would bring the whole idea before the "pupils" and because, since we were experimenting, we could, if necessary, "cover a multitude of sins" under that heading. At succeeding teacher meetings (many in number) we organized the course into ten lessons and carefully outlined each one. During the Christmas vacation we completed our work of preparation in a few intensive meetings where we ironed out differences of opinion and definitely decided upon conclusions to be arrived at in the various phases of the lessons.

It was planned that each "pupil" be given a lesson sheet and each teacher a teacher's sheet made up by the four teachers and mimeographed or typed in the county office. The purpose of the teacher's sheet was to have each lesson carefully outlined that the teacher could cover the lesson thoroughly and completely and at the same time all teachers would cover exactly the same work. The pupil's sheet was made up of three parts as follows:

1. Eight or ten simple questions were listed at the top of the sheet in order to get every person present started to work and taking part.
2. From four to eight questions which constituted the body of the lesson or the "discussion," and
3. Several questions on the next lesson which were for the purpose of exciting interest.

The first night each "pupil" was provided with a sheet of graph paper. The teacher had a specially simplified set of figures on the general price level since 1800 and on the prices farmers pay and receive. The "pupils" had pencils and rulers and the carefully given instructions made it possible for each one to construct three graphs or curves. After making one they knew how to read a graph.

These graphs were discussed and the rest of the evening was spent in talking about the situation on the farm, and working out a set of lessons for the remaining nights. By a little guiding on the part of the teacher the group of pupils presented the same set of lessons already planned by the teachers. This was an indication that the time spent on the selecting of lessons was worth while.

The lessons that followed were arranged in the same way. At 7:30 sheets were passed out and each pupil jotted down answers to as many of the easy questions as he was able to answer and they were of the type that could be answered easily. It was found that if a man took part in the beginning he was much more likely to recite later when he had an opinion or was called upon. Books and bulletins were available and were used as needed. Sometime during the week after each lesson the four teachers had a meeting to talk over results and plan for the next meeting. We found this a great help and it kept us full of enthusiasm.

Some of the things we learned were:

1. You can't be too elementary in the work offered.
2. Let the class do the talking.
3. Watch your time and cover the lesson.
4. Keep the class on the subject.
5. Don't let a few do all the talking.
6. Call upon individual members for an opinion.

The next year we used the subject of soil fertility, teaching some elementary chemistry, the growth of plants, humus, tillage, lime, etc. Our other two courses have been dairying and poultry and we are planning on teaching farm mechanics and rural sociology at some future time. In the last three years we have had the co-operation of three or four teachers from outside the county. In all, we have enjoyed the adult classes even more than the daytime classes.

Farm Mechanics

A "Home Made" Farm Grinding Wheel

GEORGE C. BOND, Chester, Vermont

SOME of the boys in the agriculture classes in Chester High School have been interested in constructing a grinding wheel suitable for ordinary farm use but which would cost as little as possible. The story of their efforts and success may be of interest.

The project started from a short article in one of the "popular" scientific magazines about making an electric motor from an automobile generator. The instructor was a trifle dubious of the outcome, but it seemed that a boy could learn something of generators and electricity even if the job at hand were not entirely successful. Then, too, the magazine article was very encouraging.

Of course, the first thing was to secure the generator, and one of the boys found one on a passe automobile. This was dismantled sufficiently to allow all the lead wires to be taken off and the field coils connected to wires that could be plugged into a light socket. It was tried out to see that the coils were magnetized and that there was no short circuit to blow fuses. A heavy solid wire (No. 10) about a foot long was connected to the adjustable brush, and a portion of the bared wire near the other end was held against the armature and moved to find the position at which the direction and speed of the motor was most desirable. One of the other two brushes was placed at about the desired point. The third brush was removed. In some generators a brush will need to be relocated with new holes drilled for attaching, but this is not difficult.

This done, the generator had become a motor running at about 2,000 r.p.m. and was ready for operation. The problem was to provide for the transfer of power. The generator came without pulley or gear on the tapering shaft. Fortunately there was a nut on the end of the shaft, and it was not too difficult to drill a piece of hard wood "2x4" to closely fit the taper of the shaft, and by the use of a washer and the nut to attach it securely. The block had been cut to an octagon with about 2" diameter before attaching, and, lacking lathe tools, was rounded, smoothed, and trued with a wood rasp held against the pulley as the motor was running.

During this operation it was discovered that the motor would heat considerably if run very long. Consequently a fan was made from a piece of heavy sheet iron and screwed to the outside of the pulley, thus also serving to hold the belt in place.

By this time the grinding wheel had arrived at the cost of $3.71 delivered; this was the only expense thus far. The material being at hand, it was necessary to set it up. It was rather simple to cut and bend the strap from a bundle of galvanized iron roofing to make two straps fitting over the motor and pulled tightly by bolts through the bench. The motor gave hardly a tremor when fully tightened. The belt was gladly given by the owner of a service station, for it was a flat leather fan belt left over from a supply for out-dated Model T Fords. By attaching the grinder to the bench with small lag screws there was completed a grinding unit costing $4.00 (including bolts and screws) and as complete as any priced at $10.00 or more.

To this expense should be added the cost of electrical connections, including armored cable, a safety switch for the protection of operators, and fuse to protect other circuits in case of trouble at the motor. This cost, which would have been incurred with any unit that might have been purchased or constructed, was $2.50. Probably there should also be added $.53 for bolts and screws used in the construction of a special bench 18" square for the grinder. The other materials of the bench were "2x4's," "2x3's," and planks—all odd pieces left over from other work. The unit was covered with a guard made of "3 square" hardware cloth left over from basement window guards made by the class.

After the grinder was complete and in operation it was found that a light directly over the work would be a great asset. Consequently one was installed with odd pieces of used material supplied by the janitor and the instructor, and costing nothing (except the bulb, and that came from the janitor's stock).

Altogether there was constructed by the agricultural department an electric grinding wheel, guard, and special bench; and a light was installed at a total cost of $7.03. All this is $3.00 less than the cheapest electric grinder priced, and the commercial wheels were smaller, there was no guard, no connections to entrance switch, and no bench.

The moral of this story is this: Every farmer should have a shop, and in that shop he should have a means for keeping his tools in proper condition. Here is a method which has actually been worked out and is satisfactory. It is a delightful job for a mechanically minded farm boy to arrange a grinder in the above described manner, and the investment in the unit, alone, is less than 40 percent of the cost of a cheap commercial wheel.

A Tin Can

CLARENCE BONSACK, Teacher of Agriculture, Oregon, Wisconsin

I FIND soldering one of the most interesting phases of farm mechanics. We consider the following material in the class room:

a. What is soldering—the tools and material necessary for soldering.

b. Methods of heating and keeping the iron in condition.

c. Cleaning of repair jobs.

After demonstrations and discussion for two or three days in the class room we go to the shop for practice work. I have found an ordinary tin can desirable for this practice. I have a ten-cent-store can opener that turns and presses inside the small rim of the can so there is no opportunity to cut fingers.

The following exercises are done by each student on his can:

(1) With a nail make several holes in the bottom and have the boy repair the leaks. Inspect work when completed and record grade.

(2) Solder the outside seam, top and bottom, around the can where two covers were placed. Inspect and record grade. Students in all cases are interested in grades and may be inspired to improve leaky, poor, rough soldering to increase the grade.

(3) Solder the inside seam around bottom of can—the circle. Inspect and grade.

(4) Cut with tin snips a long cut in side—straight down to bottom—straighten tin and solder smoothly. Test for light over light bulb. Inspect and grade.

(5) Cut out section, approximately one inch square at top of open end. Give student piece of tin to put on patch. Inspect and record grade.

(6) Repair jobs: Having completed the five jobs with the tin can the student is ready for home repair jobs. In most cases the piece needs to be straightened by use of wood mallet and piece of iron pipe. Seams of tin pails need to be opened at times and cleaned. Wash boilers, milk pails, galvanized wash tubs, pans, cups, milk cans, etc., may be brought to school, mended and inspected before taken home.

With large classes I have found that my supply of blow torches is insufficient so I use my small gasoline cook stove which I use on camping trips. I can heat half a dozen irons on a burner. My record sheet for the course is as follows:

Job Sheet for Soldering Records

	John Smith	Henry Jones	Sam Williams	Henry Truth
Holes in can	90	87	95	75
Outside seams—top and bottom	85	90	95	80
Inside seam	90	90		75
Side cut made	x	x	x	x
Soldering side cut	90	88		
Patch—cut out side	x	x		
Patch completed	95			
Repair jobs No. 1	95*	95†		
job No. 2				
job No. 3				
Etc.				
Final Grade Soldering				

*Cup. †Boiler.

This shows that all 4 boys have completed the first 2 exercises. Sam has not completed his inside seam. All 4 boys have had the side cut made by the teacher (x) and John and Henry have completed the job. John and Henry have had the piece cut out of the side of the can (x) and John has completed it. John and Henry have each done a repair job.

Interesting Patrons in Farm Shop

RICHARD C. LIGHTER, Supervisor of Agriculture, Camptown, Pennsylvania

SIX years ago our high school added vocational agriculture to its curriculum with a large amount of criticism and opposition on the part of some of the patrons, their main objection being the expense. When the school term began in September every person was ready to closely observe the organization of this new enterprise and anxious to see what the outcome would be.

The first task we had to do was order enough equipment, that is, tools, text books, lumber, and hardware, to meet our needs for as small cost as possible. Next we built our class room tables, work benches, book shelves, and cupboards. We made tables for twenty-four persons from old discarded lumber, and made work benches for twelve people, buying only lumber, vise-screws, and bolts. Our shop at the present time is equipped to give instruction in woodwork, saw filing, forging, cold metal, soldering, lathe work, harness mending, gas engine work, electricity, pipe fitting, and general repair work all at the same time.

Building and arranging our equipment consumed a large amount of time during the first year. This gave the patrons a fine opportunity to visit our shop; some came in curiosity; others came who were interested in the work, and a few came to see what fault they could find. These contacts proved valuable to us for thru them we made many staunch advocates for our department.

During the early part of the school year we were invited to the various community clubs and social gatherings and asked to explain just what vocational agriculture and farm shop really was. This was a big opportunity to sell the work in our community. When the patrons learned that all repair construction work completed in our shop was absolutely free excepting for the cost of materials, that all work leaving our shop must be satisfactory to the owner, and that we did not intend to run in competition with blacksmiths and the community handy-men, interest in the work began to grow. During the last six years we have repaired over 2,000 shop jobs without a complaint from anyone dissatisfied with work done for them. A satisfied patron is our best advertiser and booster.

At all times I carry a little note book so that when visiting farmers I can jot down any articles I see that are in need of repair and ask them to bring these articles to our shop for attention. This list is drawn from when we are ready to teach a certain type work, and the farmer is always glad to get the needed repairs made. In many instances farmers come into the shop and do the work themselves under our supervision because the boys do not have time to take care of all the jobs. This offers a valuable contact for us. In cases where the sons of patrons are in our department they bring in the articles in need of repair and do the work themselves, and by the time a boy completes a four-year course in school he has had experience making all kinds of repairs on his home farm. The parents are always more proud of work

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Securing Farm Machinery for Repair and Adjustment

E. O. BOLENDER, Vocational Agriculture Instructor, Hilliards, Ohio

WHETHER our repair and adjustment work in farm machinery functions in the life of the farm boy as it should will probably depend largely upon our success in securing a sufficient quantity of the desirable type machinery for this particular phase of our farm mechanics work. Three factors which I believe will have a decided influence in procuring the amount and type of machinery desired, over a period of years, are as follows:

Field Observations

First, the observations we make in the field during the summer when we are at our regular supervisory work. I can probably explain this best by a definite example. Last summer when I was on a regular trip in project supervision, working with one of the boys dusting potatoes, my attention was attracted to his father in the adjacent field who was clipping a wheat stubble. I seldom overlook an opportunity to go over and pass the time of day, etc., in a situation of this sort. The particular thing that aroused my curiosity in this case was that the father was carrying a long whip over his shoulder. Upon approaching him and asking him "Well, how's she working?", he replied "She's not working so good." He said he had just spent quite a bit of money on the cutter bar but it didn't seem that it had helped it much. He backed the mower out of the stubble, I examined it and found that a ledger plate or two was missing and that the guards were badly out of alignment. I took time to explain to him that the knife action in the bar was like a pair of scissors and that, outside of a few minor repairs and adjustment, the main thing needed was alignment of the guards so the knife would have a good scissors action, and that we would be glad to overhaul it in the shop for him.

We do our farm machinery work in the junior and senior years in our school and the boy with whom I was working in this particular case was not ready for this course as he is a sophomore. The next fall when mowers started coming into the shop, this boy let it be known to his father what was happening and he immediately sent word to know if we were ready for his mower. Space does not permit citing other examples of this sort, but a procedure of this type has gone a long way in helping solve this particular problem in our farm machinery work.

Seasonal Work

Second, the seasonal approach or procedure followed in our machinery work. By this I have in mind especially the time of the year at which we work on a particular type machine. In my judgment the above factor is of decided importance since it has a definite relationship to a realization or appreciation of repair work that needs to be done, to storage of farm machinery, and to ease and safety of getting it into the shop. For example, if we do our work on mowers and wheat drills in the early part of the school year, in the fall, the troubles or repair jobs that need to be done are still fresh in the mind of the farmer. It has been just a few days or weeks since the machinery has been used and the troubles he has just recently experienced cause him to be in a receptive state of mind for this type of work. Of course, all machinery cannot be repaired at this time of the year and, on the above basis, it would not be desirable but will be taken up in the latter part of the year in time to get it ready for spring and early summer work. Plows, corn planters and grain binders are probably good examples of machinery for this time of year.

The matter of storage is also, I believe, an important factor. If we take our mowers and drills in our early fall work, they have not in all probability been put in storage yet. If we wait until machinery is stored we run into two problems. First, if machinery has just been stored, there is the natural tendency to hesitate about getting it out again; second, it may be stored in behind three or four hundred shocks of fodder if the practice is followed as is necessary in a good many instances. If the farmer has used good judgment in storing machinery like mowers, drills, etc., they will be in behind all other machinery which is to be used in the early spring or summer.

I feel that a good many teachers have added to their troubles in getting machinery for repair, in that they have left their machinery work for a mid-winter job. In a good many communities, bad roads become quite a factor. In some cases they may make the job impractical if not impossible. On hard surface roads the safety of transporting machinery in extremely cold weather comes in for some consideration unless we are able to bring it in by truck. An example of this was observed during the past winter. One morning when it was decidedly below zero a mower was being pulled into the shop and because of the extreme cold, in so far as it could be determined, the cast mower wheels simply shattered to pieces. I saw the wheels piled up in the corner of the shop and I should say there was not a piece which was over ten inches long.

It may be that all of the above points do not apply universally, but I am giving these thoughts out of the experiences I have had in Ohio.

Quality of Work

Third and lastly, the quality of work done. Surely nothing can have any greater or more lasting effect toward securing machinery repair jobs over a period of years, than the quality of work turned out. In our shop we have spared no time or effort in seeing that the piece of machinery, whatever type it might be, was turned out in the best possible condition for the money expended. I have in general made a personal check and the boys and I have followed machinery in the field and made adjustments to see that it operated properly.

While I am sure that all of us take more pride in operating a piece of machinery that is nicely painted, adding to the life of the machine in general, be sure that the boys do not get the idea that this is the major and all-important job in overhauling, repair, and adjustment work. We should remember that a good job of painting is not the thing that keeps a mower from choking down in

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Future Farmers of America

F. F. A. Operates Large Hatching Business

GEORGE H. BARNES, Adviser,
Presque Isle, Maine

THE Presque Isle Future Farmers of America have just completed a very successful chick hatching season. A total of 23,100 baby chicks has been hatched and sold this year, with an increase of 6,100 over last year. Weekly hatches have been hatched from March 6th to June 5th, with approximately 1,500 day-old chicks being sold per week.

The chapter owns and operates a large Manmoth Buckey electric incubator with a setting unit of 6,528 egg capacity, and a separate hatching unit capable of holding 2,176 eggs. This $1300 equipment is operated by the agricultural boys under the direction of their instructor.

Agricultural students at the Presque Isle High School, Presque Isle, Maine, are getting baby chicks ready for shipment. From left to right: Stanley Junkins, Thompson Merritt, George H. Barnes, instructor, and Owen Smith

Barred Plymouth Rocks and Rhode Island Reds are the two chief breeds hatched. A small volume of White Plymouth Rocks were hatched this season. All eggs were purchased, at a high cost, from state accredited, disease-free, high producing flocks. Approximately 2,150 eggs were purchased each week thruout the hatching season. The average percent fertility from these eggs was 90.7 percent. The average hatchability received was 77.6 percent.

These chicks were sold as day-old, in lots of 25 or larger. The average order was 125. In one case 1,200 were delivered to one customer. Practically all of these chicks were sold in the local county.

Naturally, this business must be well organized in order to be operated successfully. This is where the boys in the Future Farmer organization fit in. Each boy has his specific job. For example, the chief salesman looks after all sales. His job is to see that all chicks are sold in advance. He records all the orders. He encourages other boys to get orders. The chief shipping clerk takes charge of delivering all chicks. He manages the boxing, counting, labeling, and mailing. He collects for all orders. The chief egg tester has charge of testing all eggs for fertility and hatchability. This is done on the 18th day of incubation. He records all results of fertility and hatchability each week. These boys have assistants who help in all the work. Practically all this work is done outside of the regular classroom program. Much of it is done at nights and early in the mornings.

The Presque Isle Chapter of Future Farmers of America has its corps of officers who has charge of all major activities, of which this chick business is one.

Future Farmer Paraphernalia

THE Manilla Chapter of Iowa finds that it derives more interest and enthusiasm from its members now that it has the paraphernalia for a full-fledged Future Farmer meeting. Last year the chapter started from scratch as far as our finances were concerned.

The first undertaking was to get everyone to pay up his state and national dues. This done, the next big task for a chapter of 45 active members was to raise money for the chapter fund. Many ways were suggested by the boys. They finally conceived the idea of selling popcorn and candy at the football games. Popcorn at ten cents a pound was popped in the homemaking room and transported to the football field. Candy bars were purchased from the local merchants at a little above cost. The profit on such an enterprise was very small but the chapter paraphernalia is a partial result of our efforts throughout the football and basketball seasons.

Our first step in getting our equipment was to have the farm shop boys make the pedestals for the chapter. Six pedestals were made so that each officer has one before him in the meetings. Swift and Company sent the pictures of Washington and Jefferson without cost to the organization. The miniature plow was secured from John Deere Company. The yellow ear of corn came from a local corn field. Later after it had thoroughly dried, it was varnished with several coats so as to prevent shelling. One of the boys caught the owl and the chapter had it mounted by a local business man. The walnut gavel was made in the farm shop class as was the rising sun. The American flag was mounted on a walnut block as are the rest of the symbols. The Future Farmer creed and the charter are framed and hung in the vocational agriculture room. This room is converted into a chapter meeting room the second Wednesday evening of each month. The secretary's book and treasurer's book are furnished by the state department. At present we have manuals for each of the officers, but plan to have one for each member. A bulletin board with an oak frame and enclosed with glass has been placed in the corridor across from the assembly. A bronze plate bears out that it belongs to the Manilla Chapter of the Future Farmers of America. Current chapter happenings, pictures, and other chapter articles are displayed so that the rest of the school knows that the Future Farmers are busy. Last but not least the boys saved enough money to secure the large F. F. A. felt banner with the name MANILLA CHAPTER in large gold letters across the bottom against the background of national blue. The banner is three by six feet and is placed above the station occupied by the chapter president at regular meetings.

It was not until last year that the chapter found the real joy and pride in having the symbols and other equipment for chapter meetings as well as displaying them between meetings in the class room. This paraphernalia is well worth the sacrifices necessary by any chapter so that the boys may enjoy the real value given to any Future Farmer meeting.

Tune in an F. F. A Broadcast over N. B. C. Farm and Home Hour, Second Monday of Each Month

Improving F. F. A. Speaking Contests

WILLIAM F. HALL, Professor of Agricultural Education, State College, Pennsylvania

IT IS none too early for contestants to have chosen and to have begun the preparation of subjects for the F. F. A. speaking contest. Such details might well have been given consideration as early as the opening of the school term.

But regardless of the state of progress in individual preparation, there yet remains ample time for the contestant's more thorough preparation if attention is called to the common weaknesses of earlier speakers and speeches. To this end we asked the three judges of the 1934 contest to record their suggestions for the contest's improvement.

Professor C. O. Williams, School of Education, Pennsylvania State College, stated, "My general impression of the contest was favorable. I thought the boys presented very creditable speeches . . . I do recall that the boys who used practical problems, closer to their immediate interests as themes, were more successful. The boys who used vague, abstract, and idealistic themes seemed out of character an muchd less convincing. . . . If the sponsors could help boys select subjects that suited them, I believe the results would be more satisfactory. . . . If the time schedule permitted, I would favor an elimination and a final contest. If, for example, the boys who were awarded the first three or four places by the three judges had been asked to speak again the next morning, I could have done much better, I think, in selecting first and second place winners. And as a judge, I would be willing to serve the additional time in order to do a better job."

Doctor Robert Allen Selby, Pastor, The University Baptist Church of State College, suggested that "the student be urged to choose a subject in which he is vitally interested and preferably one not far removed from his own experience. Further, it may be advisable to stress to the teachers in charge of preparing the contestants that all public speaking instructors emphasize the conversational method rather than the old-fashioned oratorical display. All in all the contestants made a very creditable showing."

The third judge, Professor C. S. Anderson, made, at the time of the contest, some notes of the more obvious weaknesses in subject and delivery. These he outlined as follows:

1. Avoid the use of trite, threadbare, shop-worn subjects which have been debated over and over for so many years. Select a present-day, important agricultural problem and develop a clear, concise argument for or against it.

2. Avoid partisan speeches such as the setting up of rural vs. urban arguments.

3. Resort less to quoting and paraphrasing. This practice destroys the naturalness of a speech and creates an impression of a prepared, cut-and-dried speech.

4. Try to be less visionary, less emotional, and to be more straight-thinking and practical.

5. Strive for naturalness by avoiding out-moded mannerisms.

6. Leave the impression that the speaker is responsible for the preparation of the speech as well as for its delivery.

7. Be careful to prepare a clean, correctly typed copy of the manuscript for each member of the judging committee.

It is seen that there is unanimity among the judges with reference to a choice of subjects. Their suggestions imply that any lists of suggestive subjects should be used only as intended.

"The Utilization of Economic Information in Farming" is one suggestive title for a speech. An academically-prepared speech on this subject, with the contestant's making use of all available literature on the subject, should be a last resort of the contestant. He is likely to construct a much more convincing speech if he describes how his own father utilizes economic information in farming. And most convincing would be the speaker's description of his own methods of utilizing economic information in his own farm enterprises. Adaptations of these suggestive subjects should always be made to conform with individual ability and experience.

Entrants in the public speaking contest should also be guided very carefully in the preparation of the text of the speech and in the practice of its delivery. In these particulars use should be made of any good score card for judging speaking contests.

All of the foregoing suggestions refer to the contestant, his subject, or his delivery. It may almost be said that interest in public speaking must increase. While the ability to speak effectively has always been an important asset of the leader, societal evolution has demonstrated that it has become increasingly more important. And our present-day need for leaders—trained leaders, of every conceivable degree of capacity—is obvious. Somewhat less obvious, perhaps, is the need for improvement in the every-day speech of the average layman—for clarity of enunciation, accuracy of pronunciation, and power of voice. The goals set by the English purists are not necessarily implied here. Slang, for example, appears to have its defenders. But there is no defense for sloppy habits of speech, whether by way of slang or of the most elegant English; they should be guarded against by every teacher of whatever subject.

Habits of careless speech are an indictment against teachers in general, not against the teacher of English, or of public speaking in particular. Oral expression is the medium through which most teaching, regardless of subject, is accomplished. The efforts of a painstaking teacher of English may be neutralized, or even "thrown into reverse" by teachers of other subjects. Every teacher has, therefore, a responsiblity for the fixing of habits of correct expression.

On the teacher of agriculture this responsibility appears to rest rather heavily; general F. F. A. activities are of a nature demanding much oral expression. Further, in a very few years every F. F. A. chapter may be expected to have its own public speaking contest to select its representative in the state contest. Coaching in preparation for the local as well as for the state contest will devolve largely upon the chapter adviser. There are relatively few rural high schools that have an instructor trained to teach public speaking.

From a different viewpoint, this responsibility of the teacher of agriculture becomes an opportunity of large potentiality. High schools generally, and rural high schools in particular, give scarcely more than sporadic consideration to the art of public speaking. The activity initiated by the F. F. A. chapter can and should be extended to include the entire pupil body of a high school. A natural consequence of such development would be the addition of an instructor in public speaking to the high school faculty. The latter would probably be responsible for

also.

Entrants in F. F. A. public-speaking contests have heretofore competed under rather discouraging circumstances. Some inattention in the audience may be expected as shown by the inconsiderate steady flow of groups of pupils into and from the auditorium in which the contest is being conducted, especially at the moment a contestant is speaking. Those spontaneously-formed groups of pupils and of teachers loitering (and "discussing") around the entrance to the auditorium are also serious distractions.

Such detracting characteristics of the contest may, however, be reduced to a minimum largely through teacher influence. First there is the powerful influence of example. Teachers as teachers or advisers are not privileged to ignore the common courtesies. Precept also is effective; well-deported delegations of 20 or more pupils led by a single adviser are proof. High school pupils do respond in a positive and desirable way to training in audience-deportment.

In addition to these, the extreme measure of eliminating the audience entirely has been suggested. This, of course, would eliminate summarily not only the distractive influences but also one of the most vital elements in the total learning situation. It should not be forgotten that the purpose of any contest conducted under the auspices of public education is its provision of a learning situation having a maximum of lifelikeness.

Using Preliminary Tests with Individual Instruction

(Continued from page 70)

list all former experiences in connection with the job, differentiating between those in which the pupil was entirely responsible for the activity and those in which it was a co-operative procedure.

If possible, the ability of the pupil to actually do the jobs should be tested.

I have realized, in general, the following advantages from the use of the preliminary tests: It has eliminated the study of jobs which, had they been studied, would have been an unproductive repetition. It has, in many cases, shown pupils that they were not prepared to carry out jobs in which they thought they were proficient. In all cases it has served as a most effective means of motivation.

The use of preliminary tests in the above manner has increased considerably the efficiency of individualized instruction in my department.

Supervised Practice Activities

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school board members, superintendents, and principals.

61. Making project exhibits in windows of local stores.

62. Making project exhibits at the local school, community, or county fair.

63. Conducting project contests (crop, livestock, record books), securing entries and judges; financing the contest, giving publicity to the results.

64. Comparing pupils' proficiency in conducting supervised practice with standards set up under 24, 25, 26, 27, and 28.

65. Checking project results against average results in the community for the same enterprise.

66. Surveying the nature and extent of improved practices introduced on the home farms and community, due to supervised practice work of all-day pupils.

67. Determining the extent to which boys become established in farming upon completing vocational work at school, due to supervised practice activities.

68. Determining financial returns per pupil.

69. Making preliminary supervised practice reports to the state office.

70. Making final supervised practice reports to the state office.

71. Keeping a permanent file of supervised practice records of all pupils. (To include either the completed record books of all pupils or a financial cost-of-production summary for each enterprise.)

72. Keeping photographic records of outstanding projects.

73. Giving publicity to results of supervised practice activities.

74. Maintaining a card index of farm practice activities of former pupils.

75. Providing supervised farm practice activities in co-operative effort for associate members in the local F. F. A. chapter.

76. Providing supervised practice contests for farming activities of former pupils.

77. Providing supervision of farm practices of former pupils where requested.

Interesting Patrons in Farm Shop

(Continued from page 77)

done by their own children than if done by someone else.

We have found in our observation that the average farm boy is very much handicapped for learning shop work at home because of the lack of tools and usually the tools they have are in poor condition. One of the first requirements is to have the boy gather up all tools around home and bring them into the shop and put them in first-class condition. They build racks for the home shop and then the tools are arranged so that they are handy and always in condition to use. The shop maintains a list of tools and equipment necessary for a home workshop suitable for making all kinds of average farm repairs. From this list the boys and their dads select tools to add to their list so as to have a complete farm shop.

This idea of having the boys arrange a systematic farm shop at home has been a great boost to our department. The parents became more interested in our shop work when their boys are repairing these home tools and equipment which have been, in many cases, discarded and thrown aside.

All work is very closely examined before it leaves the shop. Sometimes a boy or group of boys are required to repair a piece of equipment several times before it is allowed to leave. This, along with the very small incidental charge for the repair, has won the confidence of our patrons and keeps us overrun with repair work. About 95 percent of the work completed is repairing farm equipment and 5 percent is construction of articles for the farm and farm home.

The four most important factors which have helped us to interest farmers in farm shop are as follows: First, be sure the work is done as well as could be done anywhere; second, make the repair for the least possible cost; third, do not turn any repair work away, and fourth, operate the shop without additional cost to the taxpayer; in other words, have it self-supporting.

Securing Farm Machinery for Repair and Adjustment

(Continued from page 77)

heavy June grass, nor a wheat drill from leaving blank spaces in the middle of the wheat field when the farmer stops and takes time out to make it clear to one of his political friends as to why he should support him in the coming election. Nor will a good job of painting keep a gas engine from backfiring while a good job of repair and adjustment will. I am not opposed to a good job of painting but I have observed some groups of boys at work which I felt had the idea that herein lay the success of a good job.

As a further means of intelligently following the machine in the field for the adjustment, and as a means of showing the owner the service given and the repairs and adjustments made, careful record of same is made and one copy goes in our files and one goes to owner. The following are exact copies of records as mentioned:

THOMAS WHEAT DRILL
Owner, Clark Van Schoyck

Repairs and Adjustments	Cost
1—Yoke for lifting disk	$ .50
1—Pawl spring	.05
6—Conductor tubes	.05
2—Washers for grain shaft	3.00
6—Pins for fertilizer cups	.01
	.03
Removed and cleaned disk bearings Sharpened disk and oiled bearings Tightened and oiled pawls Cleaned fertilizer grain and seed box	
1—Pinion for grain drive	.40
1—Yoke for fertilizer shift	.40
Postage	.10
Shop charge, oil, grease, keys, paint, etc.	.50
Total	$5.24

IOWA ASSOCIATED GAS ENGINE
Owner, John White

H. P. 1¾
R.P.M. 470
Low Tension Magneto
Water Cooled
Gas Feed—Suction
Governing System—Hit and Miss

Timing of exhaust valve—
a—Opened 15° before C.D.C.
b—Closed 30° before H.D.C.
Timing of spark—
25.5° before H.D.C.
Poor compression
a—Rings
b—Valves
Poor ignitor points
Weak ignitor spring
Bearings loose
Bad head gasket

Repairs Made	Cost
Exhaust valve timed to open— *a*—27° before C.D.C. *b*—12° before H.D.C.	
Timing of spark— 27° before H.D.C.	
a—Put in 4 new rings	$1.20
b—Ground valves	
Put in new stationary electrode	.50
Put in new ignitor spring	.10
Scraped bearings	
New gasket	.18
Soldering of tank, grease, oil, etc.	.50
Total	$2.48