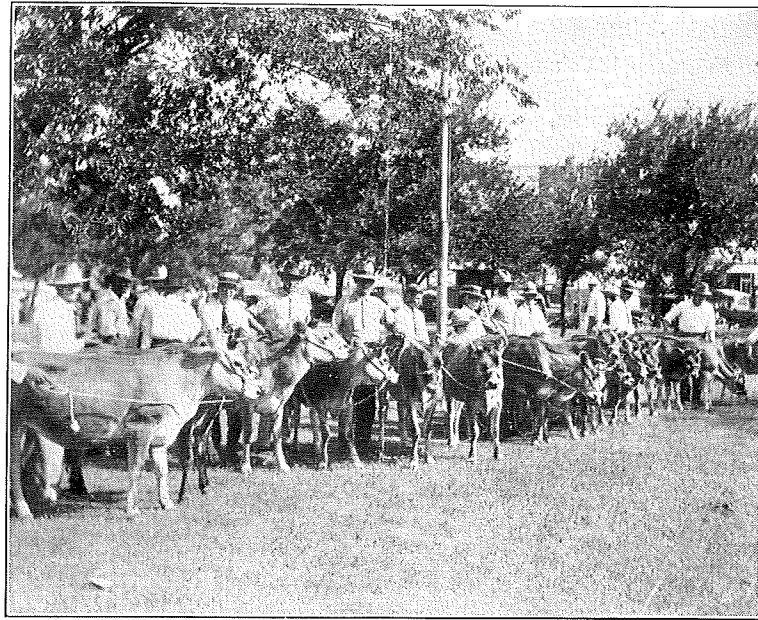


Vol. IV

JULY 1931

No. 1

Agricultural Education



The promotion of livestock improvement and assistance in the selection of desirable animals, is a worthwhile summer activity for the teacher of vocational agriculture.

This is a scene in Texas.

Reading furnishes the mind only with the materials of knowledge; it is thinking that makes what we read ours.—JOHN LOCKE.

EDITORIAL COMMENT

AGRICULTURAL EDUCATION

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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ANOTHER MILEPOST

THIS issue of *Agricultural Education* is Volume IV, Number 1. This means that for two and one-half years or since January of 1929, this magazine has been printed each month and mailed to addresses all over the United States and to some foreign countries.

It means that a comparatively small group of persons has been actively engaged in utilizing time which might otherwise have been devoted to pleasure or profit in order that the field of agricultural education might be developed as it should.

It means that over 4,000 persons have, during part of this time at least, received inspiration, helpful suggestion and valuable information each month to the end that each might make progress in the service of vocational education in agriculture. These men have contributed a dollar annually, eight and one-third cents monthly, in order that *Agricultural Education* might be published. More than this, a host of readers have contributed moral support and encouragement, helpful suggestions, and timely articles for our pages.

What of the future?

There is no reason to feel that the continued success of *Agricultural Education* is not assured. Much remains to be accomplished in promotion and development of vocational agriculture. New ideas leading to progress are constantly advanced. New methods of teaching, new supervised practice procedures, new evening and part-time school development, F. F. A. growth, all such ideas must be disseminated and discussed. There is no better medium for such broadcasting than *Agricultural Education*.

We trust that you now look upon this magazine as your own—that you recognize its value to you and your responsibility to it. We bespeak your continued interest, encouragement, and support.—S. D.

TO HANG PORTRAITS OF SMITH AND HUGHES

THE directors of the Saddle and Sirloin Club, Chicago, have consented to hang the portraits of Honorable Hoke Smith and the late Honorable Dudley M. Hughes in their Hall of Fame.

This recognition places the authors of the Smith-Hughes Act among those distinguished citizens of our country who have made the most outstanding contributions to the development and progress of American agriculture. Also, the

(Continued on page 15)

SMITH-STEWART

REGRET and pleasure intermingle in our mind as we type this announcement. We regret that Dr. Z. M. Smith, so actively connected with the magazine since before its beginning, has asked to be relieved as business manager.

Dr. Smith has faithfully and unselfishly given of his time and energy in order that *Agricultural Education* might prosper. It has not been his only "extra" or "service" activity by any means, and your Board feels that we have asked more of him than should be expected. He is released from his duties as business manager, therefore, with the hope that our sincere gratitude may be



Z. M. Smith

a partial compensation for his labors in our behalf.

Our pleasure in this transition comes in our ability to announce Dr. W. F. Stewart of Ohio as the new business manager. Dr. Stewart is head of the agricultural education department of the Ohio State University at Columbus and has been a member of the Editing-Managing Board for two years.

Dr. Stewart has always been interested in *Agricultural Education* and of help in its advancement to its present position. He will carry on the business management in his usual sincere and aggressive manner. We bespeak for him your co-operation and assistance in the arduous task before him.—S. D.

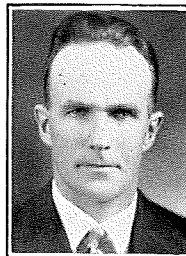


W. F. Stewart

REGIONAL REPRESENTATIVES

THE terms of office of two of the Regional Representatives on the Editing-Managing Board have expired. Due to an oversight, new representatives were not elected at recent regional conferences. The Board is therefore taking the liberty of making temporary appointments, which may be altered or confirmed at the next conference of the regions concerned.

Mr. Louis M. Sasman has been appointed to take the place vacated by Dr. Stewart for the North Central Region. Mr. Sasman has always been interested and helpful in the work of the magazine and this position will make him actively responsible



L. M. Sasman

in its management.

Dr. J. D. Blackwell, State Director for Maryland, has been appointed as the successor to Mr. V. A. Martin, State Department of Pennsylvania, as the representative of the North Atlantic region.

Dr. Stewart and Mr. Martin have served for two years. Their service is much appreciated. We are expecting new ideas and suggestions from the new members. We feel sure that each will be pleased to hear from readers in the region which he represents.—S. D.



J. D. Blackwell



Recommendations of the Land Grant College Survey Affecting Public School Education in Agriculture

H. M. HAMLIN, Iowa State College, Member of Survey Staff Representing Vocational Agricultural Education

General Nature of the Survey

THE Land-Grant College Survey, which has been recently reported in two volumes available from the United States Office of Education was initiated in 1926 at the request of the Association of Land-Grant Colleges and Universities. It has been carried on under the direction of the federal Office of Education with the co-operation of a large number of persons chosen from the land-grant institutions. A total of \$117,000 of federal money was spent on the survey and a tremendous amount of time was donated additionally by individuals. Fifty-two institutions were involved.

Findings Relative to Agricultural Teacher Training

Growth of the program. Fifty land-grant institutions now receive federal funds for training teachers of vocational agriculture. In 1928-29, 165 teacher trainers and 2,775 students training for teaching agriculture were discovered in these institutions. Of all of the graduates in agriculture from land-grant institutions in 1928, 34.2 percent qualified for teaching agriculture in federally aided schools; 24.4 percent of all agricultural graduates entered agricultural teaching on graduation. It was found that the number of students training for agricultural teaching had increased from the time of the enactment of the Smith-Hughes Act until 1922-23, but that from that year until 1927-28 a 63 percent decrease had occurred. This decline in enrollment was attributed largely to better selection of persons to receive training for teaching. There has been no decline, however, in the size of teacher training staffs. It was pointed out that the teacher training programs in these institutions are likely to continue on a considerable scale in view of the fact that public school facilities for teaching agriculture have as yet reached only 10 to 20 percent of the new farmers annually needed for replacement purposes and less than 1 percent of the adult farmers of the country for whom continuous further training is necessary.

Distribution of teacher training costs. One of the striking revelations of the survey is the fact that the land-grant institutions themselves bore in 1927-28 but 9.39 percent of the total expenditures for the salaries of agricultural teacher trainers. Eighteen institutions contributed nothing toward these salaries. Twenty-five others paid less than 10 percent of their local costs. Most of

the state's share of such salaries is commonly borne by the state board for vocational education. With the relinquishment by the college of financial responsibility for teacher training there apparently goes loss of control over it so that departments of agricultural education assume an administrative relationship to their institutions which is quite different from that of other departments.

Curricula for trainees. Diversity apparently far greater than the situation demands was found in the offerings for students training for teaching agriculture. Some institutions were teaching little but agriculture; in others, the teacher training courses were hardly distinguishable from courses in liberal arts. There was a range from 12 to 24 semester hours in the requirements of professional subjects. There was little agreement as to what natural and social sciences should be taught or how much time should be allotted to them.

Certain general trends in requirements may be noted however. Natural sciences, particularly chemistry, usually received an undue amount of attention; the social sciences, little attention. Many institutions had not yet responded to the demand for more training in agricultural economics, farm management, and agricultural engineering. The attack of a few years ago on mathematics had apparently resulted in too drastic curtailment of offerings in this field. A number of institutions were apparently specializing their students too heavily in special methods and practice teaching in agriculture, failing to give them the orientation in general professional subjects which seems necessary if they are to fit into the public school program. Curricula were apparently often thrown together without adequate regard to sequence, difficulty, or other considerations important in curriculum building. Too often the units composing the curriculum were small and disconnected.

Practice teaching. Great variations existed also with respect to the manner of providing practice teaching. Thirteen institutions were using some form of apprenticeship; eight institutions gave their practice in schools on their own campuses; the others were using nearby public schools for part-time teaching while the students pursue their regular college work.

While improvement was noted in the manner of giving practice teaching, many weaknesses remained. Sixteen institutions reported 50 or fewer hours of observation and practice. Forty-two of

the 91 practice schools were urban schools; only 12 were consolidated schools. Non-vocational pupils were utilized in 14 practice schools. Certain institutions scattered their student teachers broadcast over the state, losing thereby the opportunity of correlating closely the resident work in methods and that in practice teaching. Only 11 institutions claimed to make any use of their practice schools for research purposes. Students in some of the institutions gave most of their teaching time to observation of teaching and secured little actual teaching experience. Conferences between supervisors and student teachers were often sporadic and occasional, rather than regular. Supervisors of practice teaching were in general young, inexperienced, untrained, poorly paid, and poorly integrated with the teacher training departments they served.

Training in service. The survey showed wide differences of opinion with respect to the worth of itinerant teacher training. Some institutions were apparently crippling their resident departments in order to provide it; others would have nothing to do with it. Apparently the movement for itinerant teacher training has not recently been gaining. Perhaps this is due to a growing realization of the high cost of dispensing instruction of this sort and to the evolution of better ways of giving resident training, resulting in the disappearance in our teachers of some of the faults which itinerant teacher training had aimed to correct.

Increasing attention to systematic means of keeping teachers up to date with respect to agricultural subject matter was found.

Training teachers for positions outside the federally sponsored system. The survey report gives particular emphasis to the desirability of preparing teachers for positions involving agriculture and other subjects in schools outside the "Smith-Hughes" system. It deplores the undue relative emphasis which the land-grant institutions have given the federally aided schools, which has arisen mainly from the availability for teacher-training of considerable amounts of federal money. It calls attention to the responsibility a land-grant school has for all of the communities in its state and indicates the benefit to the federal program of developing supplementary state and locally supported programs of agricultural education in the public schools.

Restriction of teacher-training in ag-
(Continued on the next page)

riculture to land-grant colleges. The survey report advises the restriction of agricultural training to the agricultural colleges, urging not only that teachers of vocational agriculture can be better trained there than elsewhere, but that teachers of combinations of subjects involving agriculture are best prepared in the agricultural colleges.

Federal relations to the teacher training program. A minimum of criticism of the administration of teacher training by the Federal Board for Vocational Education was reported in response to a specific question on this point. The report points out however that still better relationships between federal officials and state officials responsible for teacher training might be attained if the Board would give more attention to research on teacher training problems, replacing more or less arbitrary regulations with regulations founded on the results of such research.

Administration of teacher-training within the institutions. Three principal varieties of administrative set-ups were discovered. Twenty-two departments of agricultural education were organized in a division or school of agriculture. Fifteen departments were parts of divisions or schools of education. Five departments were jointly administered by the colleges of agriculture and education. The report favors some form of joint control, fearing harmful consequences when the connections of the department either with the college of agriculture or with the college of education become loose.

Recruiting students for special preparation for teaching. The report deplores the prevailing tendency of departments of agricultural education to depend on training for teaching only students majoring in other departments and urges that instead these departments should search out persons adapted to prepare for teaching and should give them special four-year courses intended to fit them for such careers.

Developing the research function. Attention is called to the need for giving further time and money to research on problems of agricultural education, since this phase has as yet been but meagerly developed in comparison with the development of research in most of the other departments of the land-grant institutions, and particularly in comparison with the other agricultural departments of these schools.

Attention to rural education in general. Departments of education in the separate state college are urged in the survey report to give attention to problems of rural education generally and not to confine themselves to agricultural education. The stand is taken that it is thru these institutions that rural education is most likely to be advanced in many states.

Smith-Hughes and Smith-Lever Relations

Relationships between the Smith-Hughes and the Smith-Lever programs are mainly treated in the section on "Extension Services."

Thirty-three state extension directors reported in connection with the survey that their relations with Smith-Hughes administrators are satisfactory. In 43 states satisfactory relations between

Smith-Hughes teachers and extension workers were declared by the extension representatives to exist.

Certain general principles governing these relationships were laid down:

1. There can be no justification for or toleration of unreasonable duplication of effort.

2. The staffs of the two groups combined is wholly inadequate to the task ahead.

3. The needs of and service to local people should determine the service each agency is to render, not "prerogatives" of institutions or agencies.

The following summary paragraph from the report indicates well its general tenor at this point:

"For each there is a large field that may be satisfactorily defined. It is the job of administrators to define these fields. Smith-Hughes activities are built around the public school. There is no disagreement as to function in the task of dealing with regularly organized classes made up of pupils in the school. Neither is there any question raised by extension workers in regard to regularly organized part-time or evening classes or home projects for either youths or adults when they are an integral part of real organized class work. Difficulties

Table I

AVERAGE SALARIES OF HIGH SCHOOL TEACHERS IN COMPARISON WITH OTHER GROUPS OF GRADUATES OF LAND-GRANT COLLEGES AND UNIVERSITIES

High School Teachers (Men)		
Years Beyond Graduation	Number	Average Salary
2	433	\$1,995.38
5	521	2,382.44
10	148	2,883.48
15	88	3,889.20
20	25	4,080.00

College Teachers (Men)		
Years Beyond Graduation	Number	Average Salary
2	245	\$2,044.90
5	273	2,885.53
10	221	3,816.74
15	200	4,588.75
20	139	5,327.34

Superintendents of Schools (Men)		
Years Beyond Graduation	Number	Average Salary
2	47	\$2,297.87
5	95	2,736.84
10	38	4,296.05
15	38	4,934.21
20	17	4,970.59

Engineers		
Years Beyond Graduation	Number	Average Salary
2	1,716	\$2,204.63
5	1,516	3,092.68
10	690	4,436.96
15	724	5,637.78
20	493	6,953.34

Physicians		
Years Beyond Graduation	Number	Average Salary
2	73	\$3,489.73
5	48	5,209.38
10	75	9,463.33
15	48	10,557.29
20	39	9,455.13

Lawyers		
Years Beyond Graduation	Number	Average Salary
2	178	\$2,167.13
5	107	4,254.67
10	116	6,931.03
15	65	7,653.85
20	59	9,682.20

Commerce and Business		
Years Beyond Graduation	Number	Average Salary
2	1,274	\$2,212.21
5	1,253	3,368.75
10	906	5,678.26
15	876	7,614.73
20	451	9,154.77

Agriculturists		
Years Beyond Graduation	Number	Average Salary
2	510	\$2,021.57
5	485	2,795.88
10	433	3,485.57
15	282	4,143.62
20	88	5,051.14

arise when infrequent and general meetings with adults are held under the name of regular class work. Likewise when home projects and demonstrations are carried out on the farms of adults who may attend infrequent meetings. This is not systematic class work. It is extension work and must be recognized as coming under the jurisdiction of extension agents. If Smith-Hughes teachers participate in such work it should be with the consent and under the direction of extension agents.

"Similar statements can and should be made in regard to general community activities. No extension worker should deny the right of a Smith-Hughes teacher to become a part of the community in which he lives or to promote its welfare in every legitimate way. But all such activities that are concerned with the interests of all the farms and farm homes in the community which get beyond community boundaries and reach out over the county as a whole, must be co-ordinated with the county program of work and under the direction of the extension agent or agents.

"When boys and girls are regularly enrolled in Smith-Hughes classes and hence are carrying on home projects and are likewise participating in 4-H Club activities, great care should be exercised to make sure that the pupil's best welfare is given first consideration. It is quite possible that he cannot properly carry the two lines of work. Certainly he should not carry on one project and get credit thru both agencies. In case a choice is necessary the advantage of carrying a Smith-Hughes course under the careful guidance of a teacher resident in the community should not be overlooked."

In the section on agricultural teacher training the recommendation is made that each department of agricultural education have a representative in the extension department of its institution to serve as a liaison officer between the Smith-Hughes and Smith-Lever forces and to assist teachers of vocational agriculture in getting adequate service from extension specialists.

Earnings of Alumni in Teaching

The section on "Alumni and Former Students" in the survey report contains information regarding the earnings of 23,284 persons who had graduated from land-grant institutions. Teachers of vocational agriculture are not shown separately but the average earnings of male high school teachers in general may be compared with those of graduates in other professions. This is done in Table I.

Reprints By Sections Available

The 1,919 pages of the entire report have been separated into sectional reports, which may be had from the Office of Education. The section on teacher training comprises 296 pages with 45 pages devoted specifically to the training of teachers of agriculture.

It is my observation that the Smith-Hughes teachers have the finest opportunity to get across real agricultural information and to put over in their respective communities definite agricultural projects for the betterment of rural conditions.—A. D. Stewart, Educational Director.

North Atlantic Conference Held at Boston

ARTHUR P. WILLIAMS,
Federal Agent

THE annual conference of State Supervisors and Teacher Trainers in Agricultural Education for the North Atlantic Region was held at the Statler Hotel in Boston, Massachusetts, March 23-27, 1931. The outstanding feature of the conference consisted of reports and discussions of special studies of supervised farm practice which the men in the region had been working on during the year in co-operation with the teachers of vocational agriculture. The program was interspersed with and supplemented by talks on the agricultural situation, economic trends, and the outlook for farming. On the whole the men voted it one of the most helpful and inspirational conferences ever held in the region, and we anticipate that the fruits of our labors will appear in the form of improved quality of work thru-out the region.

Much of the material presented was in the form of case studies, including samples of project estimating, long-time supervised farm practice programs, project planning, and correlating the teaching with supervised practice. Such case studies illustrating just how some teacher of agriculture has actually put the job across rather than theorizing about it have proved very helpful and stimulating to others. They serve also as a basis for concrete discussions of the many difficult details which are frequently overlooked in generalized statements of procedure.

Another very worthwhile feature was the presence of several Massachusetts teachers on our program. These men presented their material, described their work, and participated in the conference discussions in an effective way.

Two cases illustrating the teaching of co-operative marketing thru pupil participation in their own organizations were reported. The question was raised as to whether this was good procedure as contrasted with getting experience thru joining a regular adult organization. Mr. C. C. Teague, vice-chairman of the Federal Farm Board, was present and participated in the discussion in an informal way. From the standpoint of providing first-hand experience and developing an appreciation of the principles of co-operative activities, Mr. Teague expressed the opinion that these boy organizations should be encouraged. He suggested further that an effort be made to establish relationships with some farmers' co-operative which might handle the boys' products under a special local brand. He stated that virtually the same plan had been used successfully by the citrus fruit organization in the case of special groups of farmers. He urged that every opportunity be utilized to stimulate local initiative and responsibility in producing quality products.

Case studies are to be continued during the ensuing year and will include project budgeting and estimating, integrating pupils' supervised practice experience with teaching, the effect of F. F. A. work in stimulating better supervised practice, teacher training in various phases of supervised practice, organizing subject matter, including interpretive science in relation to super-

vised practice, comprehensive programs of supervised practice, supervised practice in relation to management of the farm as a whole, and securing more complete and accurate records and accounts.

Southern Regional Conference at Tulsa

[Note: An effort was made to secure a special report on this conference, but with no results. The story printed herewith is taken from The Weekly Kansas City Star, without special permission, but with thanks.]

THE kind of a farmer that vocational agricultural educators of the South will try to train will be, first and foremost, the kind of a farmer who can adjust his farming operations to changing economic conditions.

That was the outstanding point of the discussion of their program of work which executives, state supervisors, local supervisors, and teacher-training staffs for vocational agricultural education from 12 Southern states, carried on in their fourteenth annual southern regional conference in Tulsa recently.

Robert D. Maltby, regional agent, outlined the theme of the agricultural educators' work.

"If we are going to train boys for proficiency in farming," he said, "we ought to know what kind of farmers we are trying to train. The same principles apply to our work with adult farmers in evening classes."

Then he listed 26 "abilities" which the farmer needs, in preparation of which experts of the department of agriculture and federal farm board aided.

Long Time Objectives

Later, a program of work committee of the conference chose from these the objectives to be stressed during 1931-32. The entire program was set up for long-time objectives.

Those which the supervisors voted to put into their programs next year are:

To seek further assistance of the bureau of agricultural economics in use of outlook material.

State conferences of agricultural teachers on outlook material.

District conferences following the state conferences on carrying out the program as it applies to particular areas.

Adjustment of farming programs, in each teacher's district, to changing conditions.

Development of ability by the student to continue to make these adjustments for himself.

Maltby outlined as a basis for the agricultural program in vocational agricultural education, the following points:

The agricultural program must be in accordance with our primary aim, training present and prospective farmers for proficiency in farming.

It must be economically sound.

Any agricultural program of the vocational agricultural forces that deals with farm practices should recognize tested practices which are found to be improved practices by our experiment stations and research departments.

Our program should be common with the agricultural programs of the other major agricultural educational organizations, in so far as the nature of our activities permit.

The vocational agricultural program should recognize the farm as a method of living as well as a means of living.

Included in the 26 "abilities" which the farmer should possess are ability to maintain the soil and its fertility, to produce and utilize food crops for the family, to determine actual need for credit, to understand marketing and to keep farm records.

Support for Contests

A report of the contests committee, headed by D. M. Clements, Tennessee state supervisor, that contests for future farmers now engaged in be supported, but that the number not be increased, was adopted. These contests include the events of the American Royal Livestock Show and The Weekly Kansas City Star's American Farmer contest, as well as the public speaking contest.

Dr. C. H. Lane, chief of agricultural education, told of plans for the monthly broadcast program by the Future Farmers, which began during the department of agriculture Farm and Home hour, Monday, April 13, as one of the new developments in this work with the 55,000 Future Farmers in 2,200 chapters in 44 states and Hawaii.

Diplomas of honor were presented master teachers of the states, or their supervisors. The list was headed by H. A. Glenn, Kenbridge, Virginia, the South's master teacher. Others were Joe Hudiberg, Excelsior school, Seminole County, Oklahoma; Lee A. Broadhurst, Rogers, Arkansas; W. V. Field, North Carolina; A. P. Fatherree, Mississippi; A. Larriviere, Louisiana; H. T. B. Turner, Georgia; Alex R. Johnson, Florida; A. C. Ware, South Carolina; W. H. Elam, Texas; and J. T. Lovell, Tennessee. Glenn and Hudiberg attended the conference.

In addition, recognition was given the students who are corn and cotton champions of the South. H. F. Meadows of Wilson, Arkansas, made 2,808 pounds of lint cotton on three acres at an average cost of 6.7 cents a pound, selling for 8.14 cents a pound. Arthur Marlow of Tabor, North Carolina, produced 389¼ bushels of corn on three acres at a cost of 38 cents a bushel.

More Farm Mechanics

AT THIS time of the year when the teachers of vocational agriculture are formulating their programs for next year it would be well to consider the possibility of placing more farm mechanics work in the proposed set-up. Surveys have indicated that more of this type of work is needed in not only the all day school but particularly in part-time and evening schools as well. Those who are planning for some professional improvement work for the summer could in many cases include methods in farm mechanics in their own personal programs. The impetus given of late to school consolidation with the resulting need of transportation facilities for students presents a concrete problem in economic transportation which might be solved by the agricultural instructor taking on as a part of his responsibility the servicing of school buses. Auto mechanics, tractor operation, general farm machinery, with all the attendant problems, offer an increasingly important field for the live Smith-Hughes teacher to demonstrate his usefulness to his community.—E. B. Matthew, State Director, Arkansas.



Individual Instruction in Practice

ROY W. ROBERTS, Department of Agricultural Education, University of Arkansas

AN OUTSTANDING example of the practical value of individual instruction in vocational education may be observed in the agricultural classes of the Portland, Arkansas, High School, under the direction of Hudson Wren, teacher of vocational agriculture. The use of this method of instruction at Portland is the result of a necessity rather than choice or fancy, and is occasioned by the wide range of individual differences between pupils.

The Portland School District embraces territory in the fertile delta section and the less fertile uplands of Southeastern Arkansas. The delta is occupied by large plantations ranging in size from 400 to 4,000 acres, manned by white and Negro tenant farmers. The upland farms range in size from 20 to 200 acres and are cultivated largely by the farm owner and his family. The principal crop—in fact the only crop—of the delta section is cotton. A diversified system of farming is followed in the uplands including the growing of cotton, feed crops, truck crops, and some livestock. The soils of the delta section yield from one-half to three-fourths bale of cotton per acre without the use of commercial plant food, while upland soils yield considerably less even with a liberal application of plant food.

Classes in vocational agriculture have been maintained in the Portland school for the past three semesters. At the present time 24 pupils from the ninth, tenth, eleventh, and twelfth grades are enrolled in two all-day classes. One-third of the pupils come from the homes of farm owners and two-thirds are children of tenant farmers. The school records indicate that only one-third of the pupils in vocational agriculture have attended the Portland school for more than two years.

Two fundamental differences are observed between these pupils in vocational agriculture. One of these is a difference in mental ability and the other a difference in vocational needs. These differences are somewhat wider than the normal variation and are apparently due to the location of the school district and the nature of the pupil population. The differences in mental ability are evidenced by the data indicated in Table I. The pupils in the first year class range in age from 14 to 18 years with a median age of 15. The pupils in the second year class range in age from 15 to 20 years with a median of 18. The Terman score for the first

Figure 1
A Portion of the Tally Sheet Used in the Portland School to Indicate the Grade Obtained, the Progress Made, and the Order of Study in Each Farm Enterprise on the Course Calendar.

Jobs to Be Studied	Name of Pupils								
	Collins			Gee			White		
	Grade	Check	Order	Grade	Check	Order	Grade	Check	Order
Potato Production—									
1. Estimating Cost . . .	C	X	1			15			
2. Securing Seed . . .	A	X	2			20			
3. Prep. of Seed Bed.			3			22			

year class ranges from 63 to 145 and the range for the second year class is from 57 to 159. An interpretation of this table indicates that there are pupils in one class who vary in mental age from 12 to 16½ years, and in intelligence from 80 to 108. It was interesting to note that the pupils who had attended the Portland school for a three-year period or longer had a median IQ of 95 as compared to a median of 82 for pupils new to the community.

These pupils not only differ in capacity and mental ability but also there is an apparent variation in their vocational needs that is in excess of the normal variation. In fact Mr. Wren says, "The idea for individualizing my program of instruction was due not so much to the fact that there is more than the normal variation in ability between pupils as to the difference in the type of farming in the two sections and the fact that I have both tenant and owner farm pupils from each section." Some of the pupils from the homes of farm owners need training in supervision and management of large cotton plantations. Others need training in management and operation of smaller cotton farms and diversified farms. The pupils from the homes of tenant farmers need training in some of the operative skills relating to cotton farming for their immediate use and training in farm management practices for future need. These variations may best be illustrated by the scope and character of the supervised practice programs of two of the pupils. Last year one pupil assumed the management of a 125-acre cotton farm while another was employed on this farm as a laborer.

These differences in ability together with the marked variation in needs made it extremely difficult if not well nigh impossible to organize a course of study in vocational agriculture for a group of pupils that would enable each individual to gain proficiency in the type of farming he was following or expected to engage. Mr. Wren considered

that the only solution to the problem was some form of individual instruction and he devised and put to practice at the beginning of the present school, the method of instruction described in this article.

The individual course of study was determined by the pupil and the teacher after a careful analysis of the farm enterprises and practices common to the community. Mr. Wren conducted what he calls an orientation program for the first three weeks of school. Each enterprise or practice was studied in its relation to the nation, state, community, and individual farm. Information contained in yearbooks of the United States Department of Agriculture, Arkansas Crop Reports, and a study of labor requirements for Arkansas crops, proved most helpful in these analyses. Each boy was advised to select one major enterprise for study (which in most cases was cotton) and five or six other enterprises which would seem to fit the vocational needs of the pupil as evidenced by the type of farming in which he was engaged. A spread of 11 enterprises was secured in the first-year class and 14 in the second year.

Each pupil secured a set of Job Sheets for Pupils in Vocational Agriculture* for each of the enterprises he expected to study. These job sheets do not contain subject matter but they are designed to serve as a guide to the selection and study of subject matter pertinent to the enterprise in question, from books and bulletin references. The enterprises are divided into jobs and the jobs serve as a teaching unit.

The next step in the organization for individual study consisted of the construction of a course calendar to indicate to each pupil the proficiency acquired, progress made, and sequence of study, for each job. Mr. Wren devised a tally sheet for indicating this information which was tacked on the wall of the classroom where the information might be available to each pupil at all times. A portion of this tally sheet illustrating part of the data for three pupils is indicated in Figure 1. The first column indicates the name of the enterprise and the job. The jobs are arranged in the order in which they appear on the job sheets,

Table I
Age and Scores on the Terman Group Test of Mental Ability of Pupils in Vocational Agriculture in the Portland School.

Class	Enrollment	Age		Terman Score	
		Range	Median	Range	Median
First Year	9	14-18	15	63-145	78
Second Year	15	15-20	18	57-159	93

*Holloway, Keith L. and Roberts, Roy W. Job Sheets for Pupils in Vocational Agriculture. The Vocational Publishing Company, Fayetteville, 1930.

and each job is assigned a number. The remaining columns indicate for each pupil, (first) the grade obtained, (second) whether or not the pupil has completed the study of the job, and (third) the order or sequence in which each job is to be studied. The names of all the pupils in the class are arranged in a horizontal row and the jobs to be studied in a vertical column on the tally sheet. The portion of the tally sheet shown above indicates that the first two pupils are studying potato production and the third pupil is not studying this enterprise. The first pupil has completed two jobs in this enterprise while the second pupil has not yet started on these jobs.

Directions for individual study are indicated on the job sheets. These directions include a survey of local practices, laboratory exercises, study from books and bulletin references, and project planning. These activities are carried out under the careful supervision of the teacher who provides individual assistance as needed. In some instances two or more pupils work together in the laboratory and in the field. Mr. Wren finds that he can leave the class group and accompany individual pupils on field trips or send small groups to the field unaccompanied with little or no loss of efficiency. Each pupil has adequate directions and each pupil is studying problems of vital interest to himself.

When a pupil has completed the study of one job he reports to the teacher and is given a written test. This test is usually an objective one in the form of true and false, and selective answer questions. If the pupil makes a satisfactory score he is permitted to check the job on the tally sheet, and proceed to plan that portion of his supervised practice program relating to the job he has completed in his study. The teacher writes the grade obtained on the job on the tally sheet and the pupil takes up the study of the next job as indicated by the order of jobs in the third column under his name. If one individual forges too far ahead so that the sequence is too far out of line, the teacher attempts to enrich his course of study with special references, or assigns some special work of interest to the pupil. The pupils are tested a second time at the end of each six weeks interval on the jobs completed during this interval. This check indicates the relative progress made by each pupil for the six weeks interval.

Short group discussions are held every two or three weeks as the occasion demands for the discussion of problems of group interest. Discussions these past few months have concerned themselves with emergency programs, relief measures, federal aid for agriculture, and food and feed programs. These discussions, together with Future Farmers of America meetings, tend to maintain a proper balance between the individual and the group.

Mr. Wren states that the use of the individual method requires more careful planning on the part of the teacher but the pupils evidence more interest in their work, exercise greater intelligence in the planning of the practice program, and utilize more efficiently the time spent in the study of vocational agriculture.

Methods in Agricultural Teaching

R. M. ADAMS,
Forest Grove, Oregon

SUCCESS in teaching, as in any other field of endeavor, is dependent upon many different factors. Among these we must include definite objectives or end-points. Every teacher should know what he is trying to do. There is one objective which is believed to be of outstanding importance to all teachers of vocational subjects and that is vocational efficiency. We are all primarily interested in making our students better fitted to take up and succeed in their ultimate means of earning a livelihood. How can we best do this?

Vocational efficiency depends upon the acquisition by the student of the requisite knowledges and skills to perform each specific job or task required by the occupation in question. If this be so, then our first obligation as teachers in our specific fields, is to make a job analysis and from the many jobs which present themselves to select those which appear to be of the most importance and within the range of our students' abilities to develop.

Having selected the jobs, we are then ready to develop a procedure whereby the skills and knowledges involved may become a part of the students themselves. Various methods may be used which will result in efficient instruction thru the use of motives of attraction rather than compulsion, and the other well-known laws of learning; such as, recency, frequency, and intensity.

Much time could be spent in explaining various methods which could be used in efficiently applying the principles of these laws. Suffice it to say that thru well thought out steps, suited to and varying with each teaching unit, skillful teaching can be achieved. These steps are often referred to as:

1. Preparation of the student for the study of the job in question.
2. Presentation of the student with the material.
3. Application by the student of the information.
4. Testing of the student to ascertain his actual achievement.

Opinions will probably vary as to which of these steps is the most important. Perhaps no one can be so selected. Without doubt however, the correct use of step one is exceedingly important in all of the steps which follow. If it is handled well the remaining teaching process is made easy. If handled poorly, continual difficulty will probably be experienced by the teacher and the student alike.

Because of its importance the remainder of this article will be devoted to a discussion of the preparation of the student for the study of the job in question. Here it is that the student is placed by the teacher upon one of two highways: that of compulsion, or that of attraction. The highway of compulsion is rough with numerous by-paths and detours and the motive power is furnished by the instructor. The highway of attraction is smooth and straight. The objective at the end beckons the student on and he progresses under his own motive power, guided only by the instructor. What is it that makes this difference? It is student interest. Our

most important question then is how to stimulate this desirable attitude. Various plans may be used. The value of the method varies directly with the amount of interest which it arouses. First among these one would list certain ingenious ways which will vary greatly with the teacher. They are often indirect; for example, in introducing the study of strawberries, quart samples of half a dozen common local varieties were procured and passed around to the class who noted differences in color and taste. The questions naturally arising were a fitting introduction to the study.

Another agricultural instructor treated his class to wormy apples as an introduction to the study of codling moth. In home economics one can imagine the instructor exhibiting a becoming dress of her own or treating her students to some delicacy as a means of stimulating their desire to do likewise. Certainly exhibits of finished shop work do cause boys to wish to have and make similar articles. Field trips where classes visit cabinet shops, bakeries, or farms to see the work in which they are interested actually being done, might be included in this group.

Another method which may be made effective is the questioning of the class group regarding the problem, to stimulate argument, show students how little they know and what they need to know. Some teachers use this method so effectively that their students study to "show each other up" as wrong. In any method of preparation, but especially in this one, a teacher must be ready to meet emergencies as they arise and adapt his teaching accordingly. Interest often shows itself in unexpected sources and ways.

A third method consists of presenting to the class some of the most interesting points in the study to be undertaken, in such a way as to lead them to desire to find out additional facts along the same line.

There is a fourth but less satisfactory means of preparing the student for the study of the problem, and it is probably most frequently used because it saves time and thought on the part of the teacher. This method consists in presenting the class group with a clear statement of the problem, what it is, why it is important, and what its solution should mean to the student.

In every lesson try to arouse interest. Vary the ways of introducing the topics. Do not always lecture or discuss the coming subject matter first. Precede this with a field trip or a demonstration now and then. Variety is said to add spice to life. It certainly adds interest to school work.

It has been said that interest is the mother of attention and attention is the mother of memory. To get memory we must get her mother and her grandmother. Interest then is the prime factor in the permanency of newly acquired knowledges and skills.

In conclusion, we may say that one objective of vocational teachers is vocational efficiency. Carefully thought out lesson plans are essential in reaching this end point with our students. Of primary importance is the arousing of interest which brings about self motivation. When the student is attracted by the subject matter the other steps in the teaching process may be expected to follow easily and effectively.

8
Memorandum of Meeting of
Joint Committee on
Relationships

Representing the Committee on Agricultural Extension Organization and Policy and the Association of State Directors of Vocational Education, Washington, D. C.,
April 21, 1931

(Present: Director J. C. Wright and Dr. C. H. Lane of the Federal Board for Vocational Education; and Director C. W. Warburton and Dr. C. B. Smith representing the United States Department of Agriculture; C. E. Ladd of New York; K. L. Hatch of Wisconsin; R. K. Bliss of Iowa; D. P. Trent of Oklahoma; A. E. Bowman of Wyoming; I. O. Schaub of North Carolina; H. O. Sampson of New Jersey; Ray Fife of Ohio; and J. D. Blackwell of Maryland.)

1. It is believed, that the memorandum of understanding published December, 1928, has served a very useful purpose in the development of better relationships in most of the several states. This is evidenced by the fact that since the issuance of this memorandum conflicts and misunderstandings have largely disappeared and at the present time relationships are the best since the initiation of the two lines of work.

It is believed, that all of the states should have a memorandum of understanding, either written or oral, to serve as a guide and to prevent, as far as possible, duplication and consequent criticism; but primarily to develop a greater spirit of co-operation and co-ordination of the respective lines of work.

We believe that the memorandum of 1928 still serves as a basis of satisfactory agreement for all the states and that no material modification is needed at this time. Conflicts or difficulties which have arisen during recent years are largely local, as a result of slight misunderstanding or clash in personality, and in most instances can be handled easily within the states themselves.

2. We believe it imperative that in the development of local, county, and state programs there should be the closest co-ordination and co-operation between the respective agencies, both in developing and executing the agricultural program. To this end, it is recommended that representatives of both agencies meet in conference in the preparation of programs of work.

3. There is greater need than ever before of the programs of the respective agencies supplementing each other for the benefit of agriculture. To that end, we wish again to call attention to a statement made in the 1928 memorandum, which is as follows:

"Co-operation should be the watchword in all Smith-Hughes and Smith-Lever relationships. This means going beyond the letter of the law and doing what one is not obligated to do. Both these laws were instituted in the interests of all the people. Each group, while attending to its own task first, should lose no opportunity to promote, in all practical ways, the work of the other. With this spirit animating both forces good feeling is likely to prevail everywhere and the maximum accomplished in both lines of work.

North Carolina Selects
Superior Negro Teacher

S. B. SIMMONS,
Supervisor

J. L. BOLDEN, teacher of vocational agriculture at Wise, North Carolina, was selected August 20, as the superior teacher for 1929-30. His selection marked the closing event of the state conference of Negro teachers of vocational agriculture which was in progress during the week of August 18 to 20.

Mr. Bolden spent his early life on a farm in Caswell County. He attended the public school at McIver and later entered A. & T. College, Greensboro, North Carolina, being graduated in 1919 with a B.S. degree in agriculture. For two years he taught agriculture in the public schools of Wilmington, North Carolina. In the fall of 1922, he began teaching vocational agriculture at Wise, North Carolina.

In the eight years Mr. Bolden has been on the job at Wise, he has built up a strong department with excellent equipment. Largely because of the excellent results being accomplished in his department the county board of education has expressed a desire to place a vocational teacher in every rural high school in the county. For the school year under consideration there were some 50 or more high school boys taking vocational agriculture. They made an average labor income from their projects amounting to \$73.19. From the very beginning, the vocational boys at Wise have constantly made a good showing in the various state-wide contests. The most notable achievement was made this year when three of the local boys in competition with 125 other boys from all parts of the state made the highest scores in the Chilean Nitrate of Soda Educational Bureau Cotton Contest.

This department was one of the first in the state to hold a father and son banquet. This social event has been a very useful device in building up a rich sentiment and a keen appreciation for the vocational course at the school and in the community. A father of some seventy years, said he had worked and prayed a long time for a course that would help increase the interest and training of his boy in farm life and farming practices. He told of the many improvements his boy had made in the orchard, poultry yard, and in cleaning and treating his tobacco seed. From year to year the fathers and sons meet and tell how they are co-operating in putting over a better farm program. Theory and actual practice walk side by side in this department. One day the class will study in the classroom textbooks and bulletins on pruning trees, the next day will find the class very probably in some farmer's orchard putting into actual practice, under the supervision of the teacher, the theory already discussed. Several immediate good results follow: The work of the department is sold to the community. The class is more interested because of the sound pedagogical procedure followed. More improved practices are introduced in the community.

The adult farmers are profiting by the work of the department. Both men and women are taking advantage of the courses offered to adults during the dull

seasons. As a result of this work the following improved farm practices were made last year: The acreage of wheat grown in the community has been increased from none among the Negro farmers to 200. The need of better pastures has been felt and as a starting point 170 pounds Korean Lespedeza seed were sown last year on a number of the farms. The principal of the school and several other men in the community made it possible for the department to purchase one farm-all tractor, tractor plow, tractor double disc harrow, power take-off mowing machine, grain binder, and a threshing machine. These men realize the time of man is worth more than that of mule and it takes the mule too long to do the general work on the farm. This equipment has been used in producing and harvesting crops grown on 355 acres the first year.

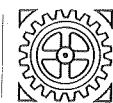
The women are just as progressive as the men. Under the leadership of Professor Bolden they all have year-round gardens. There were 24 different kinds of vegetables grown in one of the gardens last year. Each year, the ladies make a tour of the community, inspecting gardens to see who has the best one. The teacher reports the tour to be a most helpful device in keeping alive the interest in gardening. Within the last 12 months the ladies have developed a telling poultry project. Five poultry houses have been built outright and 12 others have been improved thru repairs. They handled successfully 1,600 baby chicks with a profit. More than 400 of these purebred birds have been distributed among the women of the community. The department keeps 300 young pullets on the grounds for educational purposes and to supply the boarding departments with eggs. Plans are being made for the group to store 5,400 eggs during the months of April and May next.

The success which Professor Bolden has enjoyed would not have been possible without the whole-hearted support received from Professor Cheek, the principal of the County Training School. Professor Cheek is an ardent believer in vocational education of all types.

Professor Bolden is the third teacher to win the superior teacher award. Professor S. C. Anderson of Rocky Point was first in 1927-28 and Professors C. E. Dean and Spellman of Method were second in 1928-29. The contest has been a pertinent factor in progress in all the departments thruout the state.

Conference on Negro Schools

A FOUR-DAY conference of State Supervisors and teacher trainers of vocational agriculture in Negro schools in Maryland, Virginia, West Virginia, North Carolina, and South Carolina, was held at the headquarters of the Federal Board for Vocational Education, Washington, D. C. At this conference, which was under the leadership of Dr. H. O. Sargent, Regional Agent for Vocational Agriculture among Negroes, matters of interest to teachers and teacher trainers in the field of vocational agriculture for Negroes were discussed. Activities of the New Farmers of America was another subject for discussion at this conference.



Profitable Co-operation

CLARENCE LA RUE,
Verdigre, Nebraska

WE WERE facing a problem and a perplexing one, too. The basement room which had housed our shop was too small and the three-foot door did not permit the removal of the larger shop projects. A poor crop, low prices, and a recent building program made the voting of bonds pretty doubtful.

The school board recognized the need for more room and appointed a committee to investigate the situation. They found that sufficient room could be had by partitioning off one end of a garage located four blocks from the school. The rent would have been \$30 per month, the district to put in the partition, lights, stove, and furnish coal and janitor work. One of the committee suggested that the rent for a year plus the cost of fitting up the place would make a substantial payment on a permanent building and should we decide to build within a year or so, we would have nothing to show for the expenditure.

A local lumber dealer estimated the cost of constructing a suitable building to be about \$2,000 and finally offered to build a shop on the school grounds and rent it to the district for \$50 per month, title to pass to the district when the sum of the rent paid equalled the cost of construction.

A meeting of the school board was called, the proposition was presented and was accepted. The lumber dealer in co-operation with the building committee and the agricultural instructor drew up the plans and work began, all within a week of the time that the first suggestion had been made.

Our building is of frame construction, 28 x 50 feet, with 10-foot side walls and a hip roof. The walls are lined with matched lumber nailed to 2 x 4-inch studs, with shiplap sheathing, two-ply building paper, and lap siding outside. The floor is of smooth troweled concrete thruout and slopes toward a drain at one end. The Sheet Rock ceiling is nailed directly to the 2 x 10-inch joists spaced 16 inches on centers. Heavy T-lock composition shingles are laid on sheathing over the 2 x 6-inch rafters spaced 24 inches on centers.

A 9 x 12-inch, four-section, folding door hung on a track allows us to remove the larger projects without trouble. A small service door is also provided. Fourteen large windows provide an abundance of light, especially since the interior is painted white.

A chimney measuring 12 x 16 inches inside and lined to the roof cares for the two forges and a stove quite nicely. The stove may be replaced by steam heat from the main building later.

We have our shop on the school grounds and it is built according to our own specifications. We did not have to vote bonds and at present it costs but little more than rent. In the long run it will be much cheaper and far more satisfactory.

Agriculture Class Improves Building

JOE W. STONE,
Teacher of Agriculture, Columbiana, Alabama

AN IMPORTANT activity of the class in vocational agriculture of the Shelby County High School has been the repair and improvement of their shop. A year ago their shop building was in bad condition and the shop was lacking in proper equipment.

Some of the conditions a year ago are as follows: Leaky roof, building not ceiled, no steps, only five work benches, only six wood vises, no blackboards, no bookcases, no paint cabinet, only a small hand forge, no lumber racks, three doors about rotted down, about half enough books, putty off the windows, one-third of the building needed flooring, no room to store supplies and junk.

During the year the following improvements were made: Measured and estimated and put on tin roof, estimated amount of lumber and ceiled the building, built steps, estimated material and built 18 work benches, bought and put up wood vise, bought and put up two blackboards, built and put up paint cabinet, estimated material and built big brick forge, built lumber racks, and bolt, nail, and screw cabinet, built and put up three doors, bought \$200 worth of new tools, puttied 200 window panes, floored one-third of the building, and built a supply room 14 x 14.

The shop is now in good condition and well equipped. During his four years in vocational agriculture a boy may receive training in woodwork, planning and drawing farm buildings, sharpening farm tools, painting, rope work, putting in handles, repairing harness, soldering, repairing and building farm buildings, repairing farm machinery, concrete structure, electric wiring, plumbing, repairing motors, surveying and leveling fencing, drainage, use of explosives, and laying out farmstead.

This type of training fits a boy to do almost any job to be found on the farm and should result in better and better-kept farms, farm homes, and farm buildings.

Onions Make Us Cry

J. E. VOGT,
Joppa, Illinois

THIS is my first year at Joppa, a school which has been teaching Smith-Hughes agriculture since 1927. The school ground has not been under cultivation except for a class garden project. About five acres have been limed, having an initial liming of four tons per acre. The soil is of the gray buckshot type (gray silt loam) and yellow clay. This soil is run down by cropping and has been allowed to become infested with wild garlic.

About four acres, which are heavily infested, we have seeded to sweet clover in order to control the onions and garlic. We plowed late this spring and have done considerable damage to the onions and garlic. About ten acres have been leased for the year to be pastured with hogs and cattle to keep down the weeds.

In 1932 we will seed three acres of alfalfa and eleven or twelve acres of sweet clover. As this land will need lime we will have to purchase about forty tons next year. The school ground is on the right of way of the C. & E. I. Railroad making it very easy for us to get our limestone. In order to harvest the sweet clover we will build a harvester out of an old binder, such as is used by the Casey Agricultural Department.

The machinery and power problem has not been a very difficult one. There is no implement dealer in our town and the closest one is about eight miles from here, therefore we do not get or seek any co-operation from the implement dealers. We have enough boys from the farm (this year all the boys in agriculture are farm boys) so that we have them bring in their teams and implements. Such things as discs and rollers we get from farms around town. We arrange to get them by having a system of exchange labor. The agriculture class or the Future Farmer boys do such work as seed inoculating, pruning, culling hens, and so forth, for which the farmers let us use their tools. In this way we get our work done at the proper time and in the proper way.



Vocational Agriculture Shop at Verdigre, Nebraska



Supervised Practice



Improving Projects

S. R. FINIFROCK,
Leaf River, Illinois

IT IS reasonable to believe that the community judges the quality of work being done in the high school vocational agriculture department by the type of projects the students conduct. If we justify the teaching of vocational agriculture in any community, results must be shown thru good projects as well as in the classroom.

Farm people are not going to have much faith in agricultural instruction unless the boys enrolled in vocational agriculture raise better hogs, produce more corn per acre, own higher producing dairy cows and finer beef cattle than that found on the greater percentage of the farms. The community wants to see results in the form of quality and quantity at minimum costs and maximum profits.

We are failing in our task if we allow our students to conduct such projects as a grade sow fed an unbalanced ration, an off type dairy cow, or the growing of potatoes by the same method as has been used for generations. Too often we allow boys, who come from homes which really need better methods of farming and finer livestock introduced, take grade projects and feed them rations which are unbalanced just because we feel that the financial conditions in those homes will not warrant the purchase of purebred livestock or the purchase of a protein feed to balance the ration. And by so doing are we not really doing the boys and their homes an injustice?

I believe we are, and am trying a plan of project instruction which I hope will render greater service to the rural people of the community. Briefly, the plan is as follows:

1. The agriculture teacher must have faith in the future of rural people and rural life.
2. With the students in the proper frame of mind they will be interested in hearing about other boys' successful projects.
3. Two or three weeks are then to be taken for project selection and the listing of the jobs necessary to conduct the project to be selected. The jobs are listed in the student's project notebook.
4. The student must learn how to do each job. He reads books, bulletins, farm papers, and writes up information gained in his project notebook.
5. At the end of this time a letter is written to all fathers of boys enrolled in vocational agriculture, inviting them to a meeting at the high school where project work is to be explained.
6. In a few days get the consent of every father for the boy's project.
7. Students are then ready to write up plans.
8. Students gather newspaper clippings and paste in notebook any information relating to project.
9. Monday is given over to project reports.
10. A project tour is conducted dur-

ing the summer vacation. Students have an opportunity to compare projects. Fathers are invited to go along and a picnic dinner is held at noon and a game of baseball played.

11. Project records kept accurate and neat and turned in when teacher makes frequent visits.

12. Project record completed and a good story submitted for newspaper contests.

Class Treats Wheat

A. C. EGGERS,
Vocational Teacher,
Barnard, South Dakota

SHIPMENTS of wheat in carload lots from Barnard, South Dakota, in 1928 showed that 84 percent of them were smutty. Wheat is the principal crop. Losses from dockage and reduced yield were estimated at over \$400,000.

We decided that this would make a good class project. After a thoro analysis of the situation we bought a Calkins treating machine from the Calkins Manufacturing Company of Spokane, Washington. This we mounted on a trailer and ran with a 1½ horsepower engine which the International Harvester Company let us use during the treating season.

In 1929 the smutty cars shipped were reduced to 45 percent, according to the report of the Minneapolis Grain Exchange. In 1931 it was cut down to 17 percent and smut over the Northwest averaged much higher than this. This spring we have seen to it that every farmer in this community has treated. We treated over 2,000 bushels with our machine. We bought the copper carbonate in large lots and sold it to the farmers at cost. The first year we paid for the machine by charging one cent a bushel for treating. We did not treat all the grain planted with our machine. Last winter we held a short course and took up smut losses and treatment from all angles. Early this spring we canvassed every farmer in our territory to make sure all would be treated. Those that did not use our machine treated with formaldehyde. Our aim is to entirely eliminate smut in this community. Next September we will have the results.

We started this project as a year's project but already it has taken us several. We found that it was a case of educating all the farmers to treat. Some did not believe in treating. Farmers who had never treated were urged to treat. We know that all the grain is treated and we are anxiously awaiting for our results.

Project Markers

W. C. HIGGINS,
Instructor Vocational Agriculture,
Ontario, Oregon

A TOURIST stepped heavily upon the brake and brought his car to an abrupt stop in front of a prosperous appearing farmstead. Across the fence a farmer and his son were loading hay. The tourist was curious about some-

thing and here was his opportunity to secure the information that he desired. Addressing himself to the farmer he said, "As I was coming along the road this morning I noticed several signs similar to the one that you have here. I'd like to know just what they are."

The farmer turned an inquiring glance to his son. The boy, a vocational agriculture student in the local high school, walked around in front of the sign and said, "Well, sir, it is an enlarged copy of the insignia of the Future Farmers of America and it has been placed here to mark my project which is a part of my vocational agriculture work at the high school." Then ensued further explanations followed by a visit to the project, an examination of the project record book, and a determination on the part of the tourist to investigate the community as a possible location for his future home, "For," said he, "a place that provides such training for its young people looks good to me."

Employing the F. F. A. insignia as a motif for a project marker, the writer during the past summer with funds provided by the school board, made a number of these signs in the school shop. With the aid of students they were placed at the farms on which the projects were located. As the signs were attractive, each student and his parents were glad to have a marker on the place, and right out in front, too.

(Note: Excellent metal markers are now available at a cost of 8¼ cents each. The orders must be approved by the State Supervisor.)

Future Farmer Project Tour

THE Marianna, Florida, Future Farmer Chapter recently sponsored a project tour and visited all of the projects of each member of the chapter. At the end of the day a fish fry supper was held at a nearby lake.

Mr. Rex F. Toole, teacher of vocational agriculture at Marianna, Sneads, and Grand Ridge, and adviser of the local Future Farmer Chapter, was placed in charge of the tour by the boys.

Those in charge feel that this project tour was very much worth while, since it stimulated interest among the boys by letting them see what the other boys in the class are actually doing in project work. Also, such a project tour is certainly justifiable from the standpoint of the publicity that it will naturally give to vocational agriculture. It is only by acquainting the public with what we are actually doing, that we can hope for the work to grow.

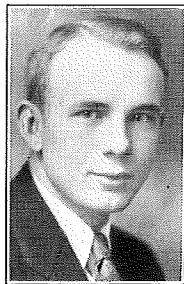
Send for Bulletin 1931, No. 20, Biennial Survey of Education in the United States, 1928-1930, Chapter VII—Agricultural Education.

This was written by Professor H. M. Hamlin of Ames and contains much valuable information and may be secured from the Superintendent of Documents, Washington, D. C., for 5 cents.



My First Evening School

C. E. HELLBUSH, Teacher of Vocational Agriculture, Kit Carson, Colorado



C. E. Hellbush

AN EXPERIENCE that usually brings shivers to a first-year agriculture instructor's back is when the state department urges that he conduct an evening school for farmers. A great many instructors with several years' experience advise first-year men not to

conduct adult schools. They argue that the teacher spends the first year in finding himself and assembling information.

I graduated from the Colorado Agriculture College in June, 1930, in animal husbandry with a vocational agriculture minor. I secured a teaching contract in an eastern Colorado high school to teach vocational agriculture. It is a consolidated high school with an enrollment of 100, the majority coming from the rural districts.

This was the initial year for agriculture in this school and my job was to establish the department and sell it to the community.

The school year started with 14 boys enrolled. I spent the first few months in teaching the boys fundamentals and in arranging their projects. At the same time I was making as many contacts with the farmers as possible.

It was nearing the holidays when it was suggested by the state department that I put on an evening school. I immediately sent in my requisition for a poultry school for farmers. I was visited by our itinerant teacher-trainer, and the outline for the first night's discussion was made out.

Inclement weather prohibited his being present at the initial meeting so I had to "foot" it alone. The topic for discussion was, "Feeding for Winter Egg Production." I had an attendance of about twelve and they were all farmers with farm flocks averaging from 150 to 500 hens.

I mustered some courage and began asking them questions about their feeding practices. I found out what they knew about feeding. I then explained to them the composition of the feeds; the constituents of the egg and of the hen's body. This gave them a background.

Next I wrote their rations on the board using an outline which read: "Rations fed," "What is wrong with ration," and "Suggested remedy." Then I gave them some balanced mash rations and answered their questions thru their discussion. Thus I made history as far as I was concerned in the evening school world.

In working out the job plans I use the outline which follows:

TOPIC—FEEDING POULTRY FOR WINTER EGG PRODUCTION

Possible Problems—

- a. Failure to get maximum number of eggs.
- b. What feeds to use.
- c. What ration is best.

Contributory Problems—which may affect egg production:

- a. Housing.
- b. Culling.
- c. Diseases.
- d. Ventilation.
- e. Breeding of flock.

Major Objective—

To establish proper feeding practices which will give the maximum egg production at a minimum cost.

Minor Objectives—

1. To find out problems of the group.
2. Find out experiences existing within the group.
3. Locate major problem.
4. Work out remedies for problems.

Devices to use—

1. Overhead question—to start discussion and get group warmed up as—"Should the poultry industry be continued in this locality?"
2. Should have some discussion as to whether to consider the topic from the commercial or farm flock basis.
3. After members get warmed up—ask the following question: "What factors must be considered in economical egg production on the farm." This should bring out the "contributory problems."
4. Now ready to bring group to topic of the evening, i. e., Feeding for winter egg production.
5. Get major feeding problem.

The following form may be placed on the blackboard as a means of summarizing feeding practices of the group:

Essentials of a Good Ration	Rations Used	Cost	What Is Wrong?	Good Points	Suggested Changes	Remedy

Note—Make charts for Essentials of a good ration, Showing nutrient content of an egg, Showing requirements of a hen for body maintenance, and so forth.

Any other pictures or charts for illustrative material.

Note—Be sure to bring problems to satisfactory conclusions.

Suggested questions to ask group—

1. Are you satisfied with the present status of the poultry industry?
 - a. What is wrong?
 - b. What can you suggest as possible remedies?
2. Should poultry be one of the farm enterprises in this section? Why?
3. If it should be continued, on what

To the large group who this month begin their work as teachers of vocational agriculture this article by Mr. Hellbush should contain helpful and timely suggestions. His conclusion is that first-year men should teach an evening school class—better, he proves that it is practical and possible.

While all of our readers may not agree with the method used in determining the enterprise to be taught we will all agree that the conference method of handling the group is most likely to obtain definite results.—Editor.

basis should it be considered?

- a. Farm flock.
 - b. Commercial scope.
4. Will feeding alone produce profitable egg production?
 5. What factors should be considered in profitable egg production?
 6. What rations are you using?
 - a. Mash.
 - b. Scratch.
 7. What system of feeding do you use?
 8. What is the cost of your ration?
 9. What percentage of eggs are you getting from your flock?

Use of conference method approved.

By using the conference method in handling the evening classes wherever possible and where a greater part of the information is known by the group, the group leader will save himself a great deal of embarrassment.

I have conducted ten meetings with the farmers in my community on varied subjects and if I were given the chance of starting again I would conduct an evening school my first year out on the job.

It is an admitted fact that situations

vary, but I believe a good man with his all-day classes will also be a good man in the evening school work. It gives a first-year man more confidence in his work, and it strengthens his hold in the community.

I sincerely believe that by holding evening classes in my community that my selling program was made much easier and that the knowledge gained by the farmers was well worth the try.

In my case it has surely been a profitable undertaking and the situation was anything but pleasing to begin with. I am heartily in favor of first-year men starting an adult program on the long-time basis.

Agricultural Exhibits at Shows and

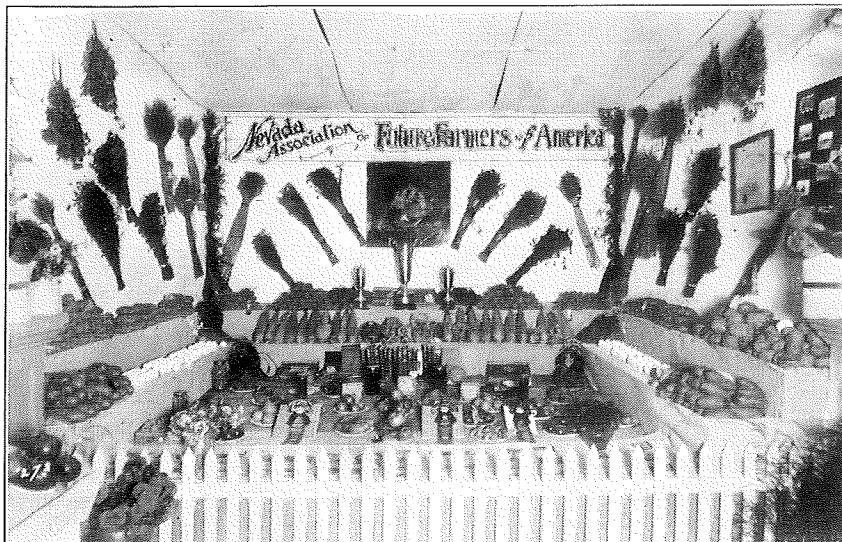
Idaho Falls Exhibit Unusual and Effective

A. H. BATEMAN,
Vocational Teacher,
Idaho Falls, Idaho

THE Idaho Falls Future Farmer Exhibit was awarded first prize at the East Idaho Fair, Blackfoot, Idaho. This display was educational, emphasizing the McLean County System of swine sanitation as worked out by the United States Bureau of Animal Industry. The idea of the exhibit was suggested by an exhibit by the United States Department of Agriculture which was shown for the first time at the 1928 International Livestock Exposition at Chicago.

The talkie title is "A Brood Sow's Rebellion" and is a dialog between a well bred sow and her owner. The dialog between the brood sow and her owner is along a line of protest on the part of the brood sow to being kept in her close quarters and frequently insanitary quarters. In her statement she calls attention to the fact that she brings into the world healthy and fine young pigs which being obliged to live in quarters which are not clean, contract round worms, and other conditions affecting the growth, health, and development of the young porkers.

The "Mama pig" asks the right to take her baby pigs out into the green pasture where they may have a right to thrive. The sow uses a very convincing argument and shows the farmer the round worms in her digestive system, the intestines, the liver, heart, and lungs. These vital organs infested with round worms are illuminated by means of red and blue electric lights. The talkie was made possible by using a telephone mouthpiece attached by wire to the detector tube of the radio, the loud speaker being concealed under the miniature house. The head of the hog was disjointed or attached by iron straps so it would be able to shake its head back and forth against the fence. Two boys whose voices had been thoroughly tested were assigned to carry on the talkie movie each day. One boy acted as announcer while the other boy operated the lighting of the hog's digestive



Future Farmers Booth at Nevada State Fair

system and caused the sow to root frequently against the wire fence.

At the left of the booth elevated above the dry lot was shown the "New way" or better way of hog raising. The model method is adopted from those in successful use in many places. Hog sanitation properly conducted will result in the saving of hundreds of thousands of dollars to hog breeders and growers of the country. This item of the exhibit demonstrated the use of rotation pastures, modern hog feeders, A-type hog houses, shade, sanitary hog wallows. This model equipment was made to order for the exhibit thru the courtesy of the Colorado Fuel & Iron Company with headquarters at Denver, Colorado. They showed a deep interest in the exhibit and gave splendid co-operation.

The exhibit also showed a set of Marketing Grade Hog Models furnished thru the courtesy of C. V. Whalin, in charge of Wools and Meat Division, Bureau of Agricultural Economics, Washington, D. C. The models are made according to market demand and in co-operation with the meat packing companies to show types and grades of hogs that are best for market demand.

Preparing Exhibit

O. P. ROBERTS,
Powell, Wyoming

EVERY agriculture department should endeavor to prepare some kind of school exhibits during the year, no matter how few or how small, if it is trying to show to its community or the state at large what is being done in vocational agriculture.

Type, neatness, and uniformity are the highlights to consider in putting up exhibits. In the case of vegetables, the charts and pictures put out by the seed companies show what type is best. Above all things, avoid the large vegetable, as the medium size, true to type, and uniform entry wins.

When preparing grass samples remember that each grass must be secured at the time that each is in best condition. Nearly all grasses mature at different times. In general, these may be collected about the time of the bloom stage. They should be spread out evenly to cure on slats, in a dark warm place where there is air circulation; a cool damp cellar is a poor place to cure grasses. As soon as grasses have cured enough to prevent heating or turning yellow inside when bundled together, roll up the sample in a neat bundle three to four inches in diameter at base, band in about three places, wrap in a newspaper and hang up sample, head down until time to exhibit it.

It is best to secure grain sheaves just before harvesting or if bundles are used, be sure to get your sample just after cutting. The reason it is not best to take it out of the shock is, that the grain is easier to work with when there is sap in the stem and less breakage will occur. The size of grain sheaves should be about three inches in diameter at small part at base of heads of sheaf. It is not necessary to strip the leaves from each sheaf, but all leaves on outside of sheaf should be stripped off. In selecting grain, select those heads that are long, well filled with plump kernels and also have a larger number of kernels to the mesh than the ordinary. Judges will also thresh out kernels and compare the grain when placing the sample.



A Brood Sow's Rebellion. Exhibit by the Idaho Falls Agriculture Department

Fairs Are Good Promotional Devices

After a bundle has been worked over, hang it up to dry in bright place head down to bleach. Do not band until it is dry as it will shrink and leave the bands loose. A cross-cut saw is the best tool with which to trim end of the sheaf.

In selecting potatoes, type and uniformity must be adhered to if sample is to get anywhere. Samples should not be washed but if they have been, give them a dust bath. Red potatoes should be kept in a dark place until ready to go before the judge as they will fade in color and not look so attractive as otherwise.

If you are sending threshed grains to a state fair, do not send mixtures. The competition is, indeed, poor when a mixed sample will place over others. There are enough boys in every agriculture department to work over such a sample in a very short time and make it clean and pure.

Each exhibit sent to the state fair should be tagged showing in what class it is to be entered and also the name of the school. If each crate had the school name upon it and a list of all articles it contained on the inside cover, it would be a great help to those in charge of the booth when repacking to send back and would also help to prevent loss of articles.

Beaverboard mountings may be used from year to year but these boards are made more attractive by repainting. All exhibits on mounts should be well spaced and show proportionate arrangement.

Extensive Exhibit at Texas State Fair

J. C. DYKES,
Professor Agricultural Education,
Texas Agricultural College

RESTORING and maintaining soil fertility was the theme of a co-ordinated group of instructional booths placed at the state fair of Texas in October by North Texas teachers of vocational agriculture.

The 150-foot exhibit was set up in three units with the central unit em-

phasizing all-day and evening school instruction, the two most important phases of the vocational agriculture program in Texas. One wing unit indicated the ways in which the evening school students are restoring and maintaining their soil fertility while the other wing unit told of the ways that the all-day boys are assisting in this important work.

Similar co-ordinated groups of booths on restoring and maintaining soil fertility were set up at the Texas Cotton Palace at Waco and at numerous county fairs by other groups of vocational agriculture teachers as a means of co-operating with the Texas Agricultural Workers Association in its state-wide educational program in soil conservation.

The state fair exhibit was prepared under the supervision of the Department of Agricultural Education of Texas A. and M. College and the State Supervisory Staff by A. B. Emmons of Whitesboro, J. M. Reynolds of Sherman, R. B. Cleveland of Garland, J. L. Owens of Pilot Point, T. G. Caudle of Mesquite, H. G. Vick of Lewisville, Henry Ross of Kerens, J. T. Rollins of McKinney, L. I. Samuel of Sanger, and A. C. Casey of Denison.

Chapter Exhibits at State Fair

The Ohio Association of Future Farmers of America has completed its second year of exhibiting at the Ohio State Fair as a part of the Ohio State Junior Fair. At the 1930 fair twelve chapters made exhibits. These exhibits were of the agricultural display type. The following scale of points used in judging indicates the type of exhibit and the emphasis placed on the Future Farmer organization:

Variety of products.....	30
Quality of exhibits.....	30
Use of F. F. A. idea.....	30
Originality of design.....	10

Total.....100
Ten prizes were given ranging from

\$100 for first prize to \$25. These displays have done much to attract attention to and interest in the Future Farmers of America organization. Vocational agriculture students also have classes in swine, poultry, sheep, dairy cattle, potatoes, and apples. These classes will be expanded another year.

F. F. A. at Nevada State Fair

R. B. JEPPSON,
State Supervisor of Agricultural Education

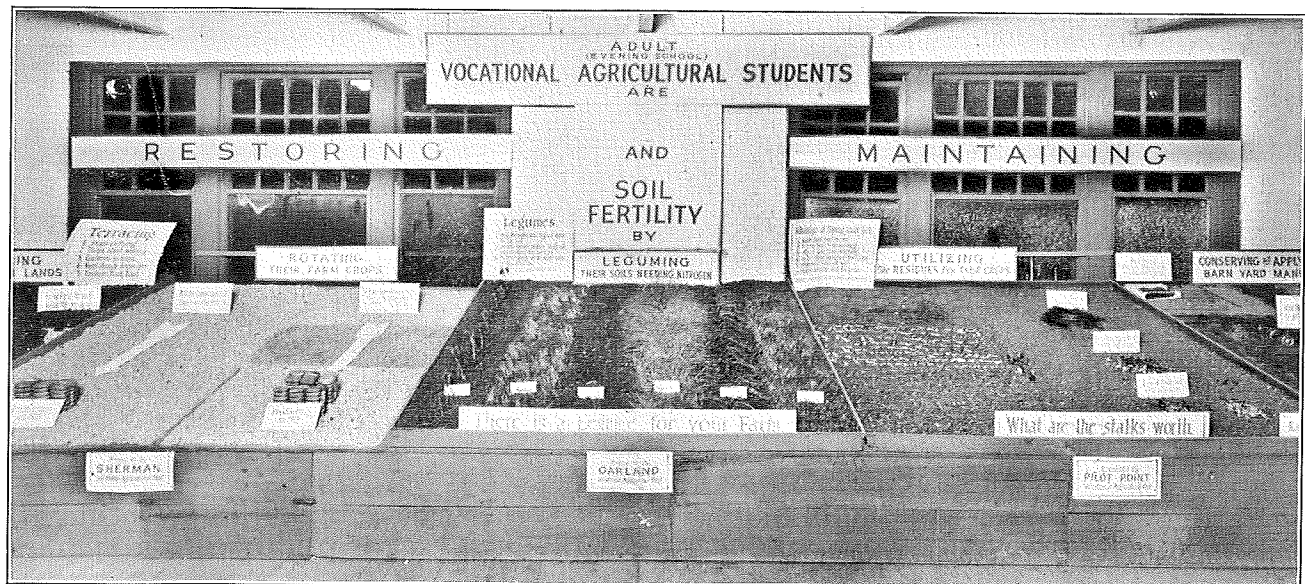
The Nevada Association of Future Farmers of America attracted a great deal of favorable comment by their exhibit and judging contests at the state fair held at Fallon, Nevada. Many first prizes were won in open competition and, in all, over \$250 in premiums were awarded to these boys. They received first place for sheaf alfalfa, barley and wheat; also seed wheat, corn, beans, dried and green, potatoes, carrots, peaches, and apples. In the livestock division they won many first and second places, including swine, sheep, poultry, and dairy cattle entries.

Across the front of the booth were many pictures showing the different activities in the farm enterprises conducted by the boys. Corn measuring 13 feet high was a part of the booth, showing the public that tall corn can be grown in Nevada.

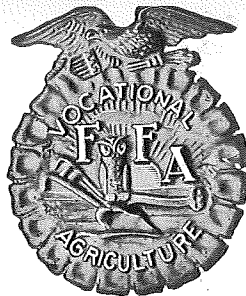
Evening School Diplomas Given in Iowa

R. L. AMSBERRY,
Vocational Teacher,
Oneida, Iowa

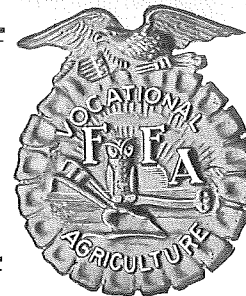
TWENTY-SEVEN farmers and 16 farm women were graduated January 21, at the third annual graduation and banquet of the Oneida, Iowa, evening school for adults conducted this past winter. The agriculture teacher was assisted by Miss Ruth Miller, home economics instructor. The course of study followed by the men during their 11 sessions was soil improvement. The theme of the women's classes was applied art.



Vocational Agriculture Exhibit at the Texas State Fair, Dallas



Future Farmers of America



Maryland Boys in State-wide Contest

J. D. BLACKWELL,
State Director

SPECIAL features of the Vocational Day Program at the University of Maryland on Saturday, May 9, included the poultry judging and public speaking contests, and an F. F. A. luncheon.

Glenn Fike, of Friendsville High School, Garrett County, coached by Charles Miller, was first; Hubert Lucas, of Hughesville High School, Charles County, coached by T. C. Martin, was second; and Raymond Gambrel, of Clarksville High School, Howard County, coached by J. C. Tignor, was third in the poultry judging contest. The winners were awarded prizes of \$10, \$7.50, and \$5 in gold, respectively, by the University of Maryland.

The team representing Frederick High School, Frederick County, consisting of Chester Stone and Emory Burrier, coached by Charles H. Remsberg, was the highest; the team representing Poolesville High School, Montgomery County, consisting of Kyle Ruble and Charles While, coached by C. M. Wilson, the second highest; and the team representing Clarksville High School, Howard County, consisting of Howard Stull and Raymond Gambrel, coached by J. C. Tignor, third highest ranking team in the poultry judging contest. The poultry judging contest was conducted by Professor Roy F. Waite and his colleagues.

In the public speaking contest, Elbert Buckel, of Accident High School, Garrett County, who was coached by H. W. Beggs, was first; Willard Easterday, of Boonsboro High School, Washington County, coached by Robert Remsberg, second; and Tolbert Lawyer, of Thurmont High School, Frederick County, coached by Ross V. Smith, was third. The winners were awarded \$10, \$7.50, and \$5, respectively, cash prizes.

Dr. W. B. Kemp, of the College of Agriculture, and Miss Hester Beall, of the Department of Public Speaking, University of Maryland, and Dr. J. D. Blackwell, of the Maryland State Department of Education, were the judges. Professor Charles Richardson, of the University of Maryland, conducted the public speaking contest. The winner, Elbert Buckel, will represent Maryland in the Regional F. F. A. Public Speaking Contest to be held at Springfield, Massachusetts, this fall, in connection with the Eastern States Exposition. Immediately following the contests, inspection tours were conducted to the outstanding experimental projects now being conducted at College Park. C. W. Seabold was in charge of these inspection tours.

The annual F. F. A. Luncheon program consisted of the following:

Opening ceremony, Future Farmers of America, Woodrow Wills, president. Group singing, led by Thomas L. Gibson, state supervisor of music; accompanied by Wesley Parish.

Address of welcome, Dr. R. A. Pearson, president, University of Maryland.

Address, Professor E. W. Broome, Superintendent of Schools, Montgomery County, Maryland.

Group singing.

Awarding of Maryland Farmer Degree Certificates, Dr. J. D. Blackwell, director of vocational education, State Department of Education.

Awarding of public speaking and poultry judging prizes, Dr. H. J. Patterson, director of experiment station, University of Maryland.

"My Observations at the National Future Farmers of America Congress," Gordon Umstead, Maryland delegate to National Future Farmers of America Congress.

Announcements, Dr. H. F. Cotterman, professor of agricultural education, University of Maryland.

Group singing.

Closing ceremony, Future Farmers of America.

Mr. W. A. Ross, executive secretary of F. F. A., and Mr. A. P. Williams, of the Federal Board for Vocational Education, and Dean Small, of the University of Maryland, also gave brief talks. Approximately 200 F. F. A. members attended the luncheon. The following were awarded the Maryland Farmer degree certificates:

David Bachtell, Smithsburg; Mack Bowman, Poolesville; Carl Everly, Accident; Austin Fraley, Frederick; Merle Garletts, Friendsville; Howard Hopkins, Highland; Malcolm King, Pooles-

ville; Tolbert Lawyer, Thurmont; Harland Ritter, Oakland; Gordon Umstead, Poolesville; Everett Weitzell, Accident; Melvin Wessell, Clarksville; Donald Williams, Millersville.

The Vocational Day Program was under the immediate direction of Dr. H. F. Cotterman, of the University of Maryland; Woodrow Wills, president of the Maryland Association of Future Farmers of America; and Dr. J. D. Blackwell, state director of vocational education.

New F. F. A. Monthly

THE FUTURE FARMER is the title of a new publication from Oregon. We find the following statement in the first number:

"This little publication makes it bow as the official organ of the Oregon Association of the Future Farmers of America in the hope that it may serve as the medium thru which the widely scattered chapters of the state organization may be brought into closer contact, one with another, and that this closer contact will stimulate a rivalry, friendly tho none the less real, which will inspire every member into greater efforts in his particular sphere of endeavor.

"The 'Future Farmer' will be published monthly and will be devoted entirely to news and views of especial interest to the large and growing group of boys and young men who make up this organization.

"The publication has the sanction of the executive committee of the State Association and will be sent regularly to every member who is in good standing in the organization."



Vocational Boys in Statewide Poultry Judging Contest at the University of Maryland



Awarded Certificate of Merit

AT THE Union Agricultural Meeting Banquet in Worcester, Massachusetts, January 8, 1931, Dr. Arthur W. Gilbert, commissioner, on behalf of the Massachusetts Department of Agriculture, awarded a Certificate of Merit "For Creditable Accomplishment in Poultry Husbandry" to Mr. Thomas Royal Demers of Rehoboth, a graduate of Bristol County Agricultural School who finished his course in 1925.

It is the custom of the Department of Agriculture, at annual meetings like this, to honor persons selected on account of "Outstanding Accomplishments in Agricultural and Rural Life." Three gold medals are awarded those who are on in years with a lifetime of high endeavor behind them. Two silver medals are awarded, one for the boy and one for the girl nearing 21 years of age ranking highest in 4-H Club work and leadership. And a parchment certificate, of distinctive design, is awarded a graduate of a vocational agricultural school or high school department about 30 years of age whose achievements warrant so high an honor. This certificate, by order of the department bears the signature of the Commissioner of Agriculture and of myself as Adviser to the Jury of Awards.

My choice in this case was endorsed by Director George H. Gilbert of Bristol County Agricultural School, and by his county agricultural agent, Mr. Warren L. Ide; also by a special investigator for the Department of Agriculture, Mr. L. B. Boston. It was made, also, with the cordial support of the directors of the Essex and Norfolk County Agricultural Schools and of instructors in charge of high school agricultural departments, some of whose graduates are nearly ready for like recognition.

Following is the printed statement prepared by the Department of Agriculture and published in an illustrated leaflet at the time of the award:

"Among the many fine records of the accomplishments of graduates of the County Agricultural Schools of Massachusetts that of Thomas Royal Demers of Rehoboth stands out prominently. In five years he has turned a piece of waste land into a highly profitable business enterprise.

"His father was an electrical engineer who, thru changing fortunes, lost his competence and his health. He came out from Providence and bought a piece of scrub woodland in Rehoboth. On this he built a shack. It was from this unpromising piece of property that the son has developed a poultry business that ranks high with other successful poultry industries of the state.

"Graduating from the Bristol County Agricultural School in June, 1925, he took hold of the scrub woodlot and started to make it pay. Without incur-

ring any mortgage or indebtedness, and wholly without initial capital, he began laying foundations. All he had to start with was a good knowledge of poultry management, secured at the Bristol County Agricultural School, a willingness to work, and an unquenchable confidence.

"Out of the receipts from the poultry business which he started there five years ago he has built a fine home with a two-car garage, also a tenement. The poultry equipment includes adequate houses, an electric incubator, and motor truck. The Demers poultry farm now has a flock of 3,600 laying birds and hatches about 35,000 chicks annually for replacements in the farm flock and for sale as baby chicks. Mr. Demers has also done notable work in improving the flock thru line breeding."

Mr. Demers, his father, and his younger brother, have worked together. The Demers Poultry Farm is a very happy family enterprise. It has prospered from the start under the guidance of this graduate; and, as so often happens under our "home project" plan of instruction, was three years along in its development the day he graduated. Like our other graduates he has had help when needed year by year to date from the school. A conservative valuation of the property now owned, after starting with scrub land, a hut, and \$1.50 in cash ten years ago, is \$25,000.

Mr. Demers is recently married, a member of the Rehoboth Grange, of the Bristol County Young Farmers Association, and of the Massachusetts Association of Certified Poultry Breeders.

This was an honor richly deserved, and capital publicity for vocational agricultural education in Massachusetts. —Rufus W. Stimson.

Value of F. F. A.

STUART E. PIERSON,
State Director of Agriculture, Illinois

AS THE agricultural member of the State Board of Vocational Education, by virtue of my office as director of the State Department of Agriculture, it is my happy privilege to extend my greetings to the Future Farmers of America thru this publication.

The plan whereby the students of vocational agriculture thruout the United States have formulated this great national fraternity, with its state divisions and local chapters, is worthy of high commendation. It is praiseworthy because it stimulates interest in the cause of agricultural education. Now, more than ever before, there is a need for agricultural education, and anything that can advance it is certainly worth while.

Aside from that, the training and experience in the field of organization work and in leadership, that this Future Farmer movement is developing, will prove of great value to all who take part in it.

The world has made its greatest progress thru the united efforts of the people who have had the ability to work in harmony. Farmers of today and of the future must unite to hold their own with those engaged in other lines. The science of uniting the thoughts and actions of individuals, like that of farming, can only be mastered by well-directed study and experience. As in any other enterprise, those who are successful "learn by doing."



Wins Swift Essay Contest

ELMER H. ZIEGENHAGEN, a Smith-Hughes agriculture student of the Bertha High School, Bertha, Minnesota, recently received a check of \$125 for winning the honor of first prize in the Swift Essay Contest conducted by Swift and Company during the month of March.

This contest was a national contest and was to be of material worked out by the student from any source he chose including material sent out by the company. Elmer wrote on "Swift's Contribution to Public Welfare."

Elmer is 17 years old, is a member of the senior class of the Bertha High School, president of the local F. F. A., was born and raised on a farm and is well aware of the existing conditions on the farm of the present day.

Elmer has taken two years' work in Smith-Hughes agriculture, and is planning on entering the University of Minnesota next fall enrolling in the college of agriculture. Paul M. Lindholm is the teacher of agriculture at Bertha.

To Hang Portraits of Smith and Hughes

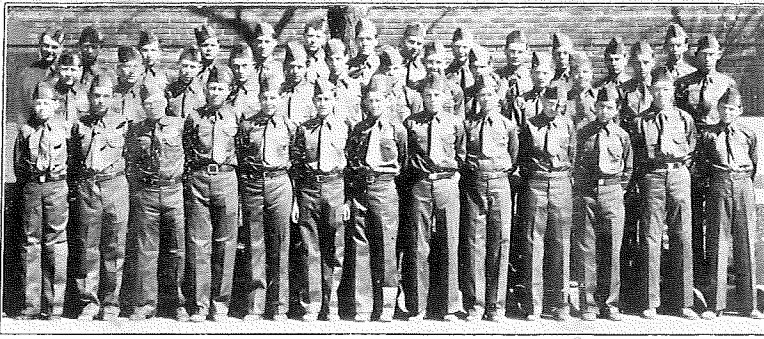
(Continued from page 2)

hanging of the portraits of these eminent statesmen is a tribute to the work that is being done by the 4,000 teachers of vocational agriculture employed in high schools and rural consolidated schools of the nation.

Since the Saddle and Sirloin Club is the rendezvous for the agricultural and livestock leaders of the United States, the hanging of these portraits will serve to create additional interest in the Smith-Hughes program of agricultural education.

The Agricultural Section of the American Vocational Association is sponsoring this activity and President C. M. Miller has appointed the following committee to raise the funds necessary to paint and hang the pictures: Paul W. Chapman, state director of vocational education, Athens, Georgia, chairman; J. D. Blackwell, state director of vocational education, Baltimore, Maryland, North Atlantic Region; E. B. Matthew, state director of vocational education, Little Rock, Arkansas, Southern Region; Louis M. Sasman, state supervisor of agricultural education, Madison, Wisconsin, Central Region; and J. A. Guitteau, state supervisor of agricultural education, Olympia, Washington, Western Region.

It is hoped that the funds will be raised in ample time so that the portraits may be hung next November during the International Livestock Exposition.—P. W. C.



All dressed up and plenty to do. Sherman, Texas, F. F. A. in uniform
J. M. Reynolds is Chapter Adviser

Future Farmer Chapters of West Virginia Co-operate to Increase Their Income

WOODROW WOLFE,
Reporter,
Masontown F. F. A. Chapter

LOW income from farm enterprises have stimulated the members of the Masontown Chapter to use better practices and lower their cost of production and marketing this next year. The first step in this program of more efficient farming has been the organization of a co-operative buying and selling group within the chapter. Each member has invested funds in this organization to create a surplus to be used in making purchases. The treasurer of the chapter in co-operation with the adviser, the local Vo-Ag teacher, acts as the purchasing agent, collects all funds, and pays bills. Some of the co-operative purchases made by the Masontown chapter are: baby chicks, poultry feeds, disinfectants, milk scales, seed corn, spray materials, and brooders.

The most recent transaction of the organization was the buying of a carload (950 bushels) of northern grown, certified, Rural Russet seed potatoes to be used by the members in their 1931 potato enterprises. This seed was purchased directly from the New York Co-operative Seed Potato Association at a considerable saving to members. Seven other nearby chapters joined with the Masontown chapter in order to make up the carload and thus lessen the cost. The order was placed in February and shipment made April 1. The several chapters had their money paid in for their potatoes by March 20. At the time this article was written, price on seed potatoes had advanced 25 cents over the price when the order was placed. The boys are getting worthwhile experience in buying direct and in working co-operatively.

California's F. F. A's at State Fair

EACH year a three-day school camp for Future Farmers is held at the California State Fair. One of the features of this get-together is the annual state F. F. A. convention. Last year 565 F. F. A.'s were in attendance. Delegates from the chapters elect new officers, name the State Farmers, and conduct the usual convention business.

The boys had on exhibit last year nearly 200 head of livestock, 806 birds in the poultry exhibit, and a great number and variety of horticultural products. Demonstrations, lectures, visits, demonstrations, lectures, and visits to exhibits were arranged.

Negro Vocational Students Hold Contests

THE Experiment Station of the United States Department of Agriculture at Beltsville, Maryland, was the scene May 5 of the annual judging contest of the students of Negro vocational agriculture schools in Maryland, North Carolina, Virginia, and West Virginia.

Corn, potatoes, eggs, Jersey cows, poultry, and hogs were the farm products judged by these vocational agriculture boys.

North Carolina carried off team honors for the contest, with South Carolina second, Virginia third, and Maryland fourth. Lee Baker of Method, North Carolina, was the high-scoring individual for the contest as a whole. Riley Totton of Sedalia, North Carolina, who for four years has been a participant in this sectional judging contest placed second, and Lucius Dacote of Hartsville, South Carolina, third.

There was keen competition for individual honors in the farm crop and livestock contests. Thomas Mosley of Edgefield, South Carolina, distinguished himself by making the highest score for an individual in judging corn, white potatoes, and dairy cows. For his achievement he will receive the purebred calf offered by Hampton Institute for the high-ranking boy in the dairy cow judging contest. Lee Baker took first place in the hog contest and Lucius Dacote in the poultry and egg contest.

Second place winners included James Quander of Upper Marlboro, Maryland, for hogs; Lee Baker and Riley Totton tied for the honors in judging eggs; William Kennedy of Allendale,

South Carolina, for poultry and cow judging; Lucius Dacote, for potatoes; and Lee Baker for white potatoes.

Third places were captured by Lee Baker in the corn work; John Fleming of Virginia in dairy cow and potato judging; Riley Totton in poultry and hog judging; and Dennis Pointer of Yorktown, Virginia, in egg judging.

F. F. A's Help the Town

Madison, New Jersey, F. F. A. Chapter

LAST spring, our F. F. A. Chapter undertook and concluded very successfully a most interesting project of community improvement. In almost the exact center of our beautiful residential district was a large lot about 100 x 300 feet, covered with coal ashes, tin cans, full of holes, and so forth. The Women's Community Club got in touch with our chapter adviser and wanted us to look it over and see if we could fix it up, saying that a local landscape gardener had given them an estimate of several hundred dollars for the job. Apparently, the lot had originally been used as a place from which to secure top-soil and later as a dump for ashes. In some places the ashes were actually five or six feet deep, other places a foot or less. On part of the high ground, however, there were no ashes.

We reported to the club that we could landscape the lot if they were willing to spend a few dollars for grass seed, which they were very delighted to do. It took us only two days (the lot is only about two blocks from the school) of our regular agriculture class time to do the job. First, we dug a couple of the deep holes deeper, saving the dirt. In the bottom of these holes we threw the glass and cans which we raked up, then ashes, and next put the dirt back. We then leveled off the other hollow spots with ashes and put several inches of dirt on the top. We then picked up the part of the lot where there was no ashes, stole enough of this top-soil to spread a two-inch layer over all the ashes, raked it all over, depositing the stone in another hole, rolled it, seeded it, rolled it again, wet it down well (it showered just as we finished wetting it down) and today we have a fine green lot for the kiddies to play on instead of an unsightly dump. The cash outlay on part of the community was about \$4 for grass seed. After this experience, you may be sure the Community Club appreciates us in a practical way.



Class turkey project at LaSueur Center, Minnesota. 24 pound Toms at 22 weeks with a flock average of 17 pounds means good feeding and management. Entire feed cost from May to November was \$1.32 per bird or 9 cents per pound. B.B. Zimmerman is the teacher. (Story in May 1931 issue)