

Agricultural Education

EDUCATION is the first and last duty of the state. It is the surest hope of individual health, excellence, and happiness. It is the foundation of a noble home life. It is the starting point of lifelong learning. It is the mainstay of an alert far-seeing citizenship. It is the basis upon which industry thrives and improves. It lifts leisure to the realm of creative art and establishes character on the sound foundation of truth, goodness, and beauty. — From Journal of National Education Association.

If we would grow bigger, we must each day register something on the plus side of life; if we do not, life itself will register on the minus side.

—F. C. Schwedtman.

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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RESEARCH EDITORS APPOINTED

IN ORDER to stimulate contributions dealing with research problems, it has been thought advisable to appoint special editors in this field.

Dr. C. R. Wiseman, teacher trainer at Brookings, South Dakota, has accepted this responsibility for the Pacific and North-Central regions, while Professor Edmund C. Magill of the Virginia Polytechnic Institute, Blacksburg, Virginia, will be special editor for the North Atlantic and the Southern regions.

These men are well qualified for this work and we bespeak your co-operation with them in securing good copy. They will want fairly brief resumes of researches made in agricultural education. Such articles should consist primarily of a presentation of the findings of the research altho they may include a brief statement of methods of conduct.

Send such contributions directly to the special editor for your region. He will appreciate information regarding research which you feel would make valuable copy.—S. D.

RESEARCH IN AGRICULTURAL EDUCATION



C. R. Wiseman

IN OUR classes in Vocational Agriculture pooling experiences and general notions of the farm boys is good procedure up to a certain point, but finally they get at a real solution of the problem by mobilizing and utilizing the results of researches from our agriculture experiment stations. Likewise, our programs of work in Vocational Agriculture engineered by agriculture instructors, by state supervisors or by teacher trainers will be directed by our researches in Agricultural Education.

Leonard P. Ayres said that "the hope of the future is in research, supported and extended." He maintains that in proportion as that happens we shall have in our businesses and professions "increasing numbers of workers with open minds ready to remold convictions in the light of added knowledge." Such research will function only when it is disseminated and made to function. In the first issue of *Agricultural Education* magazine there was issued a statement of general policies of the Editorial Board. While it was stated that the content of the new magazine should be primarily of news content and new style, yet research work was recognized by this significant statement "Results of scientific investigations will be regarded as particularly choice news." "A certain amount of speculative and philosophical material

will be tolerated in our opinion, but largely we judge, the demand will be for articles, factual in basis." "Further it is our guess that our readers are going to resent verbosity and heavy technical types of writing."

As a special editor (Pacific and North-Central Regions) for this new feature of our splendid magazine, I solicit articles based upon researches. Many Master's Thesis in Agricultural Education are unpublished but contain certain parts which have particular value. With experience our standards for appraising your contributions will be evolved. Such contributions should be of appropriate length for *Agricultural Education*. They should be written in somewhat popular style, lucid and include brief statements of procedures, data and conclusions.

Since so large a proportion of our readers are teachers of agriculture, articles reporting research studies dealing with problems vital to the agriculture instructor will be especially welcome. Somewhere in the article state how the study bears on the teachers' problems even if indirectly so.

Sometimes a research study will yield two or three worthwhile contributions. Will you readers who are in charge of research in agricultural education or on committees in charge, who know of studies made, but unpublished, suggest to the author this medium of expression or write to me so I may know of such extent studies?

Finally let us all be intelligent consumers of research. Let us cultivate our reading appetites for such contributions and resolve to build our convictions, our plans and our work on *Facts*.—C. R. Wiseman.

SUPPORTING OUR REPRESENTATIVES

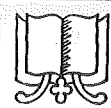
VERY soon after the passage of the George-Reed Act providing further federal support for vocational education in agriculture and home economics, the legislative committee of the American Vocational Association was called together to complete the business incident to the passage of the Act and to discuss the need for further legislation.

The first order of business at the committee meeting was a discussion of the probable effects of the Act. Naturally, there was much elation at the passage of legislation which was bound to provide needed vocational educational opportunities for additional thousands of young people and adults in the United States. The committee then turned to a discussion of the by-products of the legislation. One committee member stated, "While I realize that the additional funds are valuable to us, one of the most valuable results of our legislative campaign is the national group consciousness which has come to our thousands of vocational agriculture teachers who are realizing for the first time that they are an integral part of a great national movement."

Along with this realization of a group consciousness there came to many vocational agriculture teachers and even some state supervisors and teachers, an understanding of the importance of the national organization which has become almost synonymous with any movement for the advancement of vocational education. The American Vocational Association became to each teacher a living representative organization, to be supported not only because the state director of vocational education insisted on its support but on account of the service which it was giving to the cause of vocational education and the interests of vocational workers everywhere.

It is a trite statement to say that this is an age of organization. It is given to a few outstanding characters in our national life to have influence as individuals. For most of us, influence, outside our local communities, can come only as we express it thru state and national organizations. The American Vocational Association is, thus, the medium thru

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Pacific Regional Conference Held at Boise

WILLIAM KERR, State Supervisor, Idaho

STATE executive officers, state directors, state supervisors, and teacher trainers in the field of Vocational Education assembled at Boise, Idaho, from 10 of the 11 western states to attend the annual Pacific Regional Conference for workers in Vocational Education. Headquarters and most of the sectional meetings were held at the Hotel Boise.

The Conference opened on Monday, May 18, with a joint session of the Agricultural and Home Economics groups followed by a general session of all three groups. Thursday afternoon was devoted to an educational and recreational tour to Arrow Rock Dam and a trip thru the mountains adjacent to Boise. The remainder of the five-day conference was devoted to sectional meetings of the workers in the separate fields of agriculture, home economics, and trades and industrial education.

The joint conference of agricultural and home economics education reported on and discussed the progress being made in each state towards closer co-operation in the training program for the farm boy and farm girl. These progress reports covered successful co-operation in extra-curricula activities, student social activities, Father and Son banquets, Mother and Daughter banquets, putting on school and fair exhibits and exchange of classes between the agricultural and home economics teachers. The girls were taught short units in home dairying, poultry, gardening, and repairs about the home while the boys received help in units such as selection of their clothing, selection of food, meal planning, table etiquette, ordering meals on diners, and in hotels, camp cooking, construction and repair of household appliances, social customs, and personal appearance. In many schools the girls plan budgets for the farm income and it was suggested that the boys study these budgets in the light of prospective farm income in order to develop practical thinking along the problems of farm finance. Co-operation in adult education had been accomplished thru holding separate evening classes for farmers and their wives on the same evenings. Joint classes could also be held considering farm finance, improvements in the farm itself, and parent education in child development and child training.

The general session was devoted to an address of welcome by Mr. W. J. Lockwood, Secretary of Boise Chamber of Commerce; response by Dr. J. C. Wright, Director for the Federal Board, and addresses by Mr. W. D. Vincent, State Commissioner of Education and Executive officer for Idaho; C. F. Dienst, City Superintendent of Schools, Boise; Dr. F. B. Bomberger, Assistant Chief, Division of Co-operative Marketing, Federal Farm Board; and Mr. Perry W.

Reeves, Member, Federal Board for Vocational Education, representing Labor.

Stimulating interest in training agricultural teachers to teach Marketing of farm commodities in evening classes held with adult farmers was the central theme of the Agricultural Section of Conference. The Federal Farm Board sent five different commodity specialists to Boise to assist in stimulating a training program in Marketing. Monday afternoon and Tuesday's programs were devoted to a joint session of the agricultural supervisors, teacher trainers, and teachers of vocational agriculture with these commodity specialists. As a background for developing a training program each commodity specialist explained the plan for a National Marketing Association in his special commodity.

Mr. C. G. Randall explained how the National Livestock Marketing Association was established with Regional Associations as members, the relation of these Regional Associations to the local associations and farmer growers, and the Federal Farm Board's system of financing these local and regional organizations thru the National Feeder and Finance Corporation.

Mr. James M. Coon discussed the set up for the National Wool Marketing Association showing that it was made up of state organizations in place of regional associations as in livestock marketing. He stated that it was possible for the Wool Marketing Association to advance within two cents of the market price of wool but that bankers and other financing agencies were forcing members to sell to wool buyers in order to pay up their debts, thus turning into other channels a great deal of the wool that otherwise would be marketed thru the National Wool Marketing Association. Consumption of wool at present time in the United States has about equaled the production and the only foreign wools needed to be imported are the cheaper grades used for making carpets.

Dr. E. J. Bell stated that wheat had formerly been marketed thru wheat pools, elevator associations, and sales agencies. These agencies competed with each other for wheat markets, and it was the intention of the Farmers National Grain Marketing Association to combine these agencies thereby eliminating competition. He stated further that if agriculture is to prosper, the producers must have something to say about the control of the market, must eliminate competition between their selling agencies, put in other crops than wheat, cut cost of production wherever possible, improve the quality of grain produced, study their wheat problems in the light of the existing situation and have co-ordination of effort.

Mr. J. G. Stitts stated that to a large extent the trend was for the East to produce fluid milk for the eastern consuming centers, the Middle West to supply the cream, and the manufactured products were being supplied largely by the western dairyman. No national organization has been set up yet to handle these products co-operatively but special agreements have been made between regional associations to prevent competition in each other's territory.

The marketing of fruits and vegetables is a more difficult process than commodities in other lines because of there being 30 to 40 commodities moving thru the same channel. Mr. H. C. Hensley stated that there were still too few locals organized and that more locals would have to be organized before larger units could be set up. Three regional conferences have been held so far and a committee of 15 members appointed to draw up places for regional and national associations.

Circulars on organization and teaching procedure to be followed in evening classes have been worked out on some of the commodities and circulars for other commodities are to be developed this summer by staff officers of the Federal Board and the staff in Agricultural Service of the Federal Board for Vocational Education. These circulars list decisions to be made, factors to be considered, and sources of information to apply to these factors.

After full discussion of problems involved in teaching marketing in adult classes the following program was agreed upon:

1. Request the Federal Farm Board to use their agencies in outlining and effecting a uniform and co-ordinated marketing program in each state.

2. Each state attempt to put on an evening school in marketing in every center, when advisable using either one of the two following procedures:

- (a) Take up management and production problems and let marketing problems grow out of them.

- (b) Let requests for marketing schools come from marketing organizations, the state supervisor to contact state marketing agencies and they in turn to contact the locals.

3. Each state prepare or train teachers to put on successful evening classes in marketing.

- (a) See that courses in marketing are offered at summer sessions.

- (b) Use commodity specialists from Federal Farm Board, colleges, and so on, at summer conferences.

- (c) Check whether local teachers

(Continued on next page)

(d) Continue training teachers in conference methods.

Following the conference with commodity specialists from the Federal Farm Board, further consideration was given to marketing problems in potatoes and livestock. Mr. H. E. Drobish, agent for the United States Department of Agriculture, working as secretary of the Pacific Northwest Potato Committee outlined the factors that led to the organization of the National Potato Institute. Outgrowths of this Institute are the Interstate Committee of Potato Growers of the Eastern Seaboard and the Pacific Northwest Potato Committee which were organized to give planting and marketing information to the growers. He pointed out that altho advertising, distributing, and grading were desirable, the main factor that influences potato prices is production and therefore production must be kept below the demand. The low price of 1930 was largely due to the industrial depression and the 1931 crop is bound to be affected similarly. Three remedies were suggested as partial relief in this situation:

1. By making grades more strict and keeping the No. 2 grades on the farm as feed for livestock.
2. By educating farmers and high school students in the economic truths.
3. By heading off production thru bringing facts before farmers and showing that farmers who have high cost of production are bound to lose money.

Following Mr. Drobish's talk a committee was selected to work with him in formulating a potato program for the eleven western states.

Mr. James Wallace, Livestock Marketing Specialist, Bureau of Agricultural Economics, United States Department of Agriculture gave a discussion on livestock marketing covering the history of economic depressions, economic interpretations, and agricultural outlook factors. He pointed out the numerous sources of information available to the teachers and the uses that could be made of this material in teaching livestock marketing.

Short talks were given by the following visitors: Mr. Perry W. Reeves, Dr. J. C. Wright, and Dr. C. H. Lane, all of the Federal Board for Vocational Education; Major E. A. Smith of the Pacific Farmer Trio, Spokane, Washington; Mr. E. J. Iddings, Dean of Agriculture, University of Idaho; Mr. Smith and Mr. Martin of the Agricultural Development Service of the Union Pacific Railway System.

Mr. J. A. Guitteau was unanimously elected as Representative for the Pacific Region on the National Advisory Council of the organization of Future Farmers of America.

The remainder of the program was devoted to problems in research, teacher-training, and project standards; a special report by the Regional agent and brief five-minute talks by representatives of each of the states on outstanding accomplishments in each state during the past year; and the various committee reports on Resolutions, Objectives, New Developments, and Regional Conference for 1932.

Appointed in New York

A. K. GETTMAN, Chief of the Agricultural Education Bureau, New York, has just announced the appointment of Ralph Sutliff and Paul Orvis as regional supervisors of agricultural education and as specialists in conducting instruction in connection with winter short courses in high school departments of agriculture. Mr. Sutliff who will retain his position on the staff at the State School of Agriculture at Morrisville will reside in that community and will be responsible for supervisory activities in eastern New York. Mr. Orvis will maintain his present position on the staff at the State School of Agriculture at Alfred and will be responsible for supervisory work in western New York.

In addition each man will be responsible for conducting specialized instruction for boys and young men out of school and on farms. Mr. Sutliff will maintain this type of teaching in the field of agricultural economics and farm management while Mr. Orvis will be responsible for instruction in animal husbandry and related fields. In their capacities as special instructors each supervisor will be available for instruction in high schools throuth the state.

Tennessee Ten Year Club Formed in June

A TEN YEAR CLUB for workers in Vocational Agriculture in Tennessee was formed at the University of Tennessee during the Annual State Conference on June 26, 1931. There were 15 men in the state who had been in 10 years of continuous service. Four of the group are state and district men including, D. M. Clements, state supervisor of vocational agriculture, formerly teacher of vocational agriculture at Paris; N. E. Fitzgerald, head of the Department of Agricultural Education at the University of Tennessee, formerly with the Texas A. and M. College; Frate Bull,

teacher of vocational agriculture at Clarksburg; and G. B. Thackston, District Supervisor of Vocational Agriculture in Middle Tennessee, and formerly teacher of vocational agriculture at Gainesboro. The remaining eleven charter members are teachers of vocational agriculture from over the state. Five of these are from West Tennessee; four from Middle Tennessee, and two from East Tennessee.

The teacher in service longest is J. T. Lovell who has been at Cleveland, Tennessee since April 1, 1918. He is one of four teachers in Tennessee with ten years of service, who has spent his entire service period in one community. The others are: J. D. Cliett, who has spent his entire time since October 1, 1918, at Tyner, Tennessee; T. H. Williams, who has been at Henderson, Tennessee, since July 1, 1920; and H. E. Gholson, who has been at Clarksville, Tennessee, since July 1, 1921.

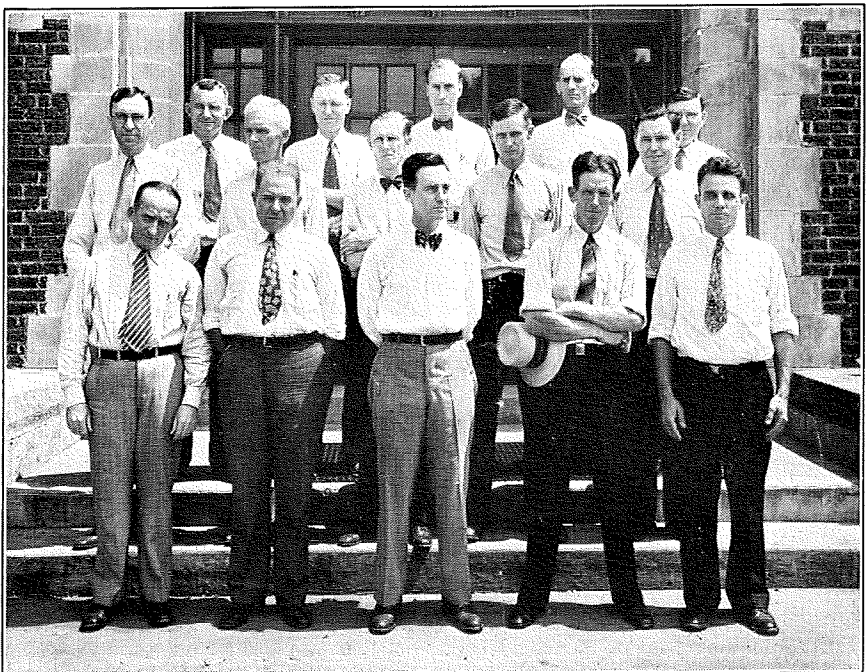
Wright Becomes Supervisor



R. T. Wright

RICHARD T. WRIGHT, former president of the Missouri and the National Vocational Agriculture Teachers Associations, was made assistant supervisor of agricultural education in Missouri on July 1, 1931.

Mr. Wright spent the past year as part-time instructor and itinerant teacher trainer in the Department of Agricultural Education at the University of Missouri. He carried on researches in the construction and use of film strips and in project record books. He received his Master of Arts degree in June.



Tennessee Ten Year Club. Left to right, Front row: G. B. Thackston, C. T. Pardue, D. M. Clements, H. G. Conley, C. E. Johnson, Back row: N. E. Fitzgerald, R. E. Bruner, H. E. Gholson, J. H. Tucker, J. W. Lovell, T. H. Williams, J. T. Lovell, F. G. Sorrells, Frate Bull, and J. D. Cliett

Local Teachers Organize On a County Basis

TRUMAN A. PARISH,
Teacher of Agriculture, Franklinville, N. Y.

NO BRANCH of high school teaching leaves so many decisions to be made by the teacher as does vocational agriculture. No type of teacher is thrown upon his own resourcefulness and ingenuity to the extent that the vocational agricultural teacher is.

Forming a course of study, making a yearly program, selecting teaching materials and literature, adapting teaching methods and countless other policies have to be formulated largely by the teacher himself. Due to the newness of the work and vast differences in various localities it is almost impossible to formulate a ready agricultural teachers' guide.

Of course supervisors and teacher trainers render indispensable aid and the occasional conference may help to solve many problems, but neither of these agencies can begin to solve all of the problems which arise daily in the class room and field.

One special characteristic is noted of the problems which confront agricultural teachers and this is that each teacher is not bothered, for the most part, by the same problems. What one teacher finds disagreeable or nearly impossible to accomplish may be of no bother to his neighbor teacher.

In September, 1930, the Cattaraugus County agricultural teachers had a meeting to see what could be done during the ensuing year to iron out some of these difficulties. It was decided that if they could get together at regular intervals and talk over their various problems among themselves, that some benefit would result. As in any group so constituted, the questions were numerous and varied. Some had trouble in 4-H work, some had difficulty in keeping notebooks, others in shortcourse groups, the project work was hard for some, and others found trouble in still other fields. Also a multitude of minor questions were raised.

It was agreed upon to meet every four weeks thruout the year at a home or agricultural department of some teacher in the county, have dinner at the expense of the host, and then put in a good two hours discussing some prearranged agricultural problem.

This plan has been carried out and nine professional improvement meetings have been held within the county this school year with nearly 100 percent attendance at each meeting. The program has been of far greater benefit than was anticipated, and certainly will continue for some time to come. This year the group was composed of Merritt of Portville, Sanders of Machias, Underwood of Randolph, Shoup of Little Valley, Farmer of South Dayton, and Parish of Franklinville. Next year two more schools will be represented.

The greatest single gain from the undertaking seems to be the fine inspiration and eagerness to improve the weak points of our program after we leave each session. In any conference these new resolutions to strengthen our weaknesses die out after some time, but with a series of such meetings new ideas and suggestions make for more aggressiveness and promote a real spirit of professionalism.

As a member of this group (and not because I am chairman) I feel that nothing within my teaching experience has helped me to do a better job of teaching as much as have these monthly meetings with my fellow teachers where we try to work out together real problems as they appear to us.

I sincerely recommend that this system be given a trial in each section where distance between schools permits. Once under way the movement will carry itself along.

Gregory Accepts Important Position



R W Gregory

R. W. GREGORY, itinerant teacher trainer for Indiana and editor of the A. V. A. News Bulletin, has accepted a position (extra time only) with the F. C. Davis Publishing Company of Philadelphia.

Professor Gregory is to be editor in charge of the agricultural publications of the company and will be responsible for the development of a series of text and reference books in this field. With his large amount of energy and good judgment, this new activity should succeed.

New York Teachers Publish Twenty-Year Book

THE Association of Teachers of Agriculture of New York commemorated its twentieth birthday at the annual conference at Farmingdale, New York, the first week in July by the presentation of an attractive twenty-year book. The volume consisting of 80 pages is a fitting testimonial of two decades of active membership in their State Association, by the teachers of agriculture of New York. Perhaps the outstanding feature of the book is the large number of photographs of conference groups, past presidents of the Association, present leaders in the development of agricultural education and pioneers in this field.

Under the caption "early days" is included an historical sketch of the development of instruction in the six state schools of agriculture and in high school departments. Then follows a brief analysis of the development and changes in the administration and supervision of agricultural education within the state. Reminiscences of "pioneers" are especially interesting since they revive many experiences common in many states in which agriculture has been taught for a decade or more. An outline of the progress in teacher training and the development and activities in connection with each state school of agriculture will be of interest to all students of the history of agricultural education.

President Leon F. Packer presents in a comprehensive summary the early struggles and difficulties of the Association of teachers of agriculture and points with no little pride to the achievements of this group during the last half decade. Mr. Packer rightfully claims that the Association of Young Farmers of New

York, affiliated with the Future Farmers of America is the child of the Association of Teachers of Agriculture. The development and activities of the Association of Young Farmers is presented in an interesting discussion. The last third of the volume is devoted to a biographical sketch of all the teachers of agriculture who have taught in New York State and whose addresses could be located.

This volume should serve as a powerful stimulus to other associations of teachers of agriculture thruout the United States. Few, if any, of the state associations have had a longer and a more constructive career of service to the profession than the teachers of agriculture of New York. At present they enjoy a 100 percent membership in the American Vocational Association and take pride in their 100 percent subscription to this magazine.

Copies of the year book are on sale by the Secretary of the Association, Ward A. Rodwell, Chataqua, New York, at \$3 per volume.

Current Trends in the Organization of Teaching

DR. HARL H. DOUGLASS, University of Minnesota, enumerates the following common principles found in current plans for teaching. Teachers of agriculture will recognize in these statements many of the fundamental principles which underlie the organization for teaching agriculture in the secondary schools.

1. Large unit assignments superseding small daily assignments, so often called "spoon feeding."
2. Assignments in terms of definite and challenging goals.
3. Opportunity for freedom and initiative on the part of the learner in planning the achievement of goals, that is, the completion of the learning units.
4. Adapting teaching to the needs of the learner with respect to what he already has achieved in the subject or unit being taught.
5. Provision of opportunity and encouragement for each learner to attend himself by carrying his learning activity into higher levels.
6. Provision for learning activities and goal which may be accomplished with reasonable effort by less able pupils.
7. Provision for diagnosis of error and difficulties and for remedial teaching aimed at the improvement of inadequate or inaccurate learning.
8. Opportunities for all learners to grow in independence in learning and study as rapidly as each is individually capable.
9. The correlation of subject matter around problems of non-school life.
10. Socialized class procedure.
11. Objective testing.
12. A lessened emphasis upon recitation and a corresponding increased emphasis upon learning activities. — *The League Script*, Minneapolis, January-February, 1931.

Thorndike states: Age in itself is a minor factor in either success or failure. Capacity, interest, energy and time are the essentials.

He that hath a trade hath an estate.
— Benjamin Franklin.

Our Leadership in Agricultural Education

Z. M. SMITH, of Indiana

BACK in 1911 one of the duties of the members of the State Board of Education in Indiana was to inspect and to certify high schools in rural districts. Dr. W. E. Stone, President of Purdue University, at that time and as such a member of the State Board of Education, accepted his full share of these responsibilities. Upon one of these trips Dr. Stone discovered what appeared to him to be an unusual and promising development in rural education. He found a young high school principal teaching a half dozen farm boys some agriculture and what was most unusual, they were being taught on a farm job-problem basis. That young man whom Dr. Stone discovered was none other than the now Dr. Z. M. Smith, State Director of Vocational Education in Indiana. The methods by which he was so inconspicuously instructing these young men of that day have come to be in this present age the standards by which effective instruction is being measured.

Dr. Z. M. Smith was born and reared on a central Indiana cornbelt farm in a typical Indiana farm home and family. Six brothers and four sisters helped him attain normal habits of growth and responsibility. Being one of the older of this group of children, it fell to his lot to accept an unusual share of the responsibilities for helping the family "carry on." He early became his father's right-hand man and remained at his side as such until he became 22 years old. At this stage in his life he did for that period an unusual thing, he determined to get a high school and college education. This was the beginning of an educational effort, wholly self-sustaining, that finally culminated in a Ph. D. from Indiana University in 1928. Previous to that time he had graduated from DePauw University with an A. B. degree in 1901 and an M. S. degree in 1905. In 1919 he received his Bachelor of Science degree in Agriculture from Purdue University.

Dr. Smith's practical training thru experience has been just as thoro as has been his professional training in college. He began by teaching for one year in a rural "deestrick" school. He was made principal of the township schools for two years and then became head of the English Department of the Rockford (Illinois) High School for two years. He next served as Principal of the Danville (Illinois) High School for five years and as such he resigned to go back into an Indiana rural high school to begin to do the kind of thing Dr. Stone caught him at that winter day 20 years ago. Dr. Stone went back to Purdue University that afternoon and immediately set the machinery in motion to transplant the "man and the idea" where it could grow and fruit more abundantly. He made Dr. Smith State Leader of Boys' and Girls' Club Work and the following year saw to it that he was made State Supervisor of Agricultural Education. Both positions have been held continuously since. In 1923 additional responsibilities



Z. M. Smith

were given to Dr. Smith when he was made State Director of Vocational Education. In 1925 he was made Professor of Vocational Education at Purdue University.

Always a proponent of the project method of teaching, Dr. Smith early in his career began to develop syllabi to guide his thinking and his teaching. In 1917 these were all combined into one and published as State Department Bulletin No. 27. Twenty-thousand copies were published and used during the first five years of the life of the Smith-Hughes Act.

Dr. Smith originated and edited the first two volumes of the American Vocational Association News Bulletin, which now goes to 10,617 vocational leaders and teachers of the United States. He is a co-author of *Crops Enterprises*, a J. B. Lippincott publication and also of "Objectives of Vocational Education" published by McGraw-Hill. "Geography of Indiana" is another product of Dr. Smith that is being used in the public schools of this state. Another notable achievement of Dr. Smith's is the important part he played in establishing *Agricultural Education* magazine as a going concern. He was chairman of the original committee and served from the beginning as Business Manager and Treasurer. No one knows except those intimately acquainted with him how much patient toil he put into making this publication go over. An unbelievable amount of painstaking effort had to be exercised before *Agricultural Education* could become firmly established upon a sound financial basis. A large share of the credit must go to him for its success.

Another most notable field of vocational education in which Dr. Smith has rendered conspicuous service has been in connection with the American Vocational Association. In 1924 when this organization came to Indianapolis for its convention it was a mere ghost of its former virile self. Many thought the

patient would die but they failed to see what a real convention might do for the invalid. Dr. Smith as secretary of the Association that year was the "man behind" which made that convention the turning point. The "crisis" was passed and Dr. Smith has served as secretary of the Association since that day. The organization struggling then with 1,222 members and a deficit, now has 10,617 members and a growing bank account. Two years ago Dr. Smith originated the Life Membership plan and already 85 life memberships have contributed to an endowment fund that is destined to perpetuate the ideals and efforts of this leader. Today every state in the union, except three, stands behind the American Vocational Association with a strong affiliated state organization.

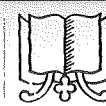
Early in life Dr. Smith raised the standards for his efforts to a high level and has fought furiously to hold them there. From the beginning he has insisted upon a thoro professional training for his teachers of vocational agriculture. Against almost unanimous opposition in 1914 he succeeded in requiring four years of training for these men before they could teach. Today he is equally insistent that they improve as they ripen in age and experience. At present there are three itinerant teacher-trainers in agriculture, four in trades and industry, and one in home economics. Plans have been approved whereby three more will be added in home economics. All of this is part and parcel of the plan of this man to serve the youth of Indiana and the Nation.—Written by R. W. Gregory.

Missouri Teachers Issue Revised Job Operations

JOB Operation sheets for Farm Shop were published by the Missouri Vocational Agricultural Teachers Association in the fall of 1928. One hundred thirty-four fundamental operations were included, the complete set costing \$3.

The original issue was exhausted in 1930 due to the sale in Missouri and in 26 other states. Steps were taken at once to issue a second edition, revised and enlarged. This edition contains 154 job operations in 16 different job groups commonly included in farm mechanics courses. A complete bibliography of farm mechanical references is given as well as suggestive job analysis and shop report blanks.

The present edition is clearly mimeographed on heavy bond paper, contains 220 illustrations, and is strongly bound between heavy green covers. It is to be used as a basic reference for shop work. Published at cost, it can be secured by addressing the Department of Agricultural Education, Columbia, Missouri. The price is \$1.50 per copy, but it may be secured for class use in orders of ten or more copies for \$1 per volume. Check or money order must accompany the order. Books will be sent parcel post and prepaid.



Criteria of Methods for the Teaching of Facts, Principles, Standards, Ideals, Attitudes, and Skills of Farm Life

D. W. PARSONS, Professor of Agricultural Education, Morgantown, W. Virginia

THE educative function of vocational teaching is to help rural people change themselves in thinking, feeling and acting. If rural people are to be able to adjust themselves to a particular environment or to control a particular environment to meet their needs, they must deal successfully with the objects and events in that environment and when possible understand the relation of those events. These particular data of objects and events of reality are in common parlance called the facts of life and the general relation of these facts constitute principles. To deal successfully with a fact implies a knowledge of its meaning and usefulness in relation to that particular life situation. To know a fact it must become an item in the individual's experience as the residual effect of having active dealings with it. The intelligent rural worker must go further than the knowledge of facts to an understanding of their relations. That is, he must have a knowledge of the principles, laws, standards, ideals, and appreciations of rural life and ability to act in accordance with them. An understanding of the governing concepts of farm life is a means to growth and adaptiveness to the changing situations of that life.

In order that the farm people may come to possess the needed knowledge of facts, principles, standards, ideals, attitudes, and techniques which should govern their behavior, the vocational agricultural teacher must provide situations in which they will deal with such items of knowledge. The teaching situations used by the vocational teacher fall into two categories:

(1) First is the use of suggestive methods for the representation and dealing with the facts and principles. In using these methods the vocational agricultural teacher depends upon suggesting or representing the information thru discussion, news articles, bulletins, letters, pictures, charts, or models. The effectiveness of such representation depends upon the past experience of the learner. Unless he has had experiences with like information or the elements of it, there can be no recall. Hence suggestive methods are likely to be uncertain and ineffective unless the teacher knows the past experience of the farm group whom he is trying to reach. The vocational agricultural teacher must talk the language of the farm people with whom he works.

In some cases the vocational agriculture teacher must have recourse to suggestive methods because the required knowledge cannot be made manifest to

the senses in an objective way; for example, when the teacher uses the tabular data of result demonstrations or experimentation station findings to develop an idea. If the farmer or farm boy follows up suggestive instruction with purposeful use of the information presented in solving his own farm problems, such teaching will not be futile and will bring worthwhile results in educative change.

(2) The second category is thru the use of objective methods in teaching. Such teaching may be on either an observational basis on the part of the learner or on a participational basis or both. In either case the vocational agriculture teacher depends upon the objective content for stimulating the learner into active dealing with such content. Examples of objective methods are field and shop practice, method and result demonstrations, field observation trips, exhibits, and the participation of the learner in his supervised practice program.

By using objective situations there is a greater opportunity for active response and participation of the learner in the learning process. Generally speaking, objective methods of teaching are more to be relied upon than are the suggestive methods for effective learning. Whichever method is used there are certain criteria that should govern the vocational agriculture teacher in the selection, organization, and arrangement of the procedures used in such teaching:

a. *Criterion one.* That the facts, principles, standards, attitudes, and skills dealt with be essential and pertinent to the desired activity in the learner for an efficient and satisfying life.

The content dealt with by the farm boys and farmers in the several teaching situations used by the vocational agriculture teacher should become subject matter functioning directly in the life of such farm people. Unless the acquired abilities in knowledge, skill, and appreciation be usable, fit into, and contribute to meeting the real needs of these farm people, such abilities will be of small import.

b. *Criterion two.* That the facts, principles, standards and ideals be dealt with in real farm life situations.

The probability that a farmer or farm boy will guide his activities for meeting a certain problem in a given farming situation by the facts learned, will depend upon the likeness of the elements of that situation to the situation in which he learned the specific items of knowledge. Unless the significant items of learning be taught in useful associa-

tions and in such associations as the learner meets in his daily activities of rural living, this learning may not function when the need arises. The concomitant elements of such situation-activities of learning help to keep such items of knowledge fresh and usable in the mind of the learner. The situation-activities of learning should be set in appropriate farm life settings of the sort that the learner may be expected to face.

c. *Criterion three.* That the teaching situations, stimuli and procedure of the educator be such as provide and occasion the necessary appropriate and required activity of the learner in the discovery and use of the requisite knowledge.

Learning is an active not a passive process. Learning comes thru the interest and activity of the learner. To change an individual in thinking, feeling and doing requires activity on the part of the learner in thinking, feeling, and acting. Where the learner is passively given the facts, principles, and techniques and makes no attempt to do anything with or about them, not much real learning results. Making use of knowledge for one's own purposes, (1) gives a better and a more complete understanding, (2) fixes the knowledge thru repetition and extends the range of associations, and (3) gives new meaning and significance to the knowledge for the learner.

Activities of satisfying discovery and use by the learner of the facts, principles and techniques of vocational teaching are essential to effective learning. Likewise the dispositions, attitudes, or habits of mind that contribute to an effective and satisfying rural life are primarily the result of participatory activity on the part of the learner in the teaching-learning situation and the later use of the resultant knowledge.

d. *Criterion four.* That the educator guide and direct the learner in the learning process.

There are different degrees of activity in learning. (1) The learner may discover the facts, principles, and techniques by unguided exploration with later trial and error use. (2) He may be shown the facts, principles, and techniques. (3) He may be guided and directed by the educator in the discovery and use of the essential knowledge.

Self-initiated and self-directed learning, if successful, results in a maximum of activity and satisfaction to the learner; and knowledge so secured is certainly fixed and retained in usable connections. However, unguided exploration

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IT IS a commonly accepted fact that teaching vocational agriculture on the farm job basis thus making farm jobs lessons, or teaching units, is one of the best procedures to follow in teaching all-day classes in vocational agriculture.

The following 10 reasons are here given to substantiate the above statement. These reasons were originally formulated, some time ago, by Professor N. E. Fitzgerald of the University of Tennessee and they are here slightly modified by the writer of this article.

1. The farm job basis permits the teaching of fundamentals and related information in close connection with a definite practical production problem in the enterprise being considered.
2. The farm basis leads pupils to reason out problems that are real in the farm business rather than work on hypothetical cases.
3. The farm job basis provides a natural unit of work and hence, a good teaching unit because natural teaching units are better than artificial ones.
4. The farm job basis teaches pupils to think in terms of problems or questions which are motivated by the pupils' knowledge of the common farm practices and also by the economic returns.
5. The farm job basis holds the pupil's thinking to one definite point—no chance to wander over the field of subject matter, as is the case in "topical study."
6. The farm basis suggests a definite objective for each lesson. This objective, if based on the farm job, is vocational. The individual lessons must have vocational objectives which are well defined if the course as a whole is to have a well defined vocational objective.
7. The farm job basis helps teachers to train boys in a particular region for farming by selecting for teaching those jobs actually being performed in that region.
8. The farm job basis enables the teacher more easily properly to allot the teaching time to the various enterprises because the method of teaching will be selected for the lesson unit (farm job) instead of for the enterprise as a whole.
9. The farm job basis makes easier for the teacher the organization of the material for teaching, because this basis affords normal, natural organization based upon specific work done.
10. The farm job basis, using the job as a teaching unit, is an easier method by which to teach because the pupil with farm experience has already naturally worked with this unit. This fact gives opportunity to base the teaching upon the pupil's experience.

In order to give teachers of vocational agriculture a few practical ideas on setting up lesson plans or teaching lay-outs of farm jobs, the three following type lesson plans are here presented.

In the southern region where a major farm problem is made the larger unit of instruction in a year's work in vocational agriculture the term "enterprise" on these type lesson plans would be changed to, "Major Farm Problem." The three type lesson plans have been very extensively used and have given excellent results.

It should be remembered that a lesson plan, in the last analysis, is nothing but an outline of a procedure the teacher wishes to follow in his teaching.

Enterprise: Any.

Job: Any Operative Job.

Situations to be dealt with:

List the important ones.

Objectives:

1. Development of operative skill to do the job according to a good standard practice.
2. Development of appreciation of importance of job.

Procedure:

1. Discussion:
 1. Clearly explain job.
 2. Bring out community situations.
 - a. c.
 - b. d.
2. Demonstration by teacher:
 1. Teacher demonstrates job as outlined on analysis sheet.
 2. Teacher clearly explains each operation and gives reasons.
3. Problems for study and discussion:
 1. Arising from pupils questioning.
 2. Others developed from related and general information thru suggestive questioning.
 3. Boys copy these in their work books.
4. Supervised laboratory or field practice:
 1. Boys practice doing job under supervision of teacher.
 2. Teacher assists boys.
5. Discussion:
 1. Discuss problems.
6. Follow-up work:
 1. Project workers write plan in work book.
 2. Others write conclusions reached in class.
7. Testing:
 1. Teacher checks boys' plans.
 2. Teacher observes work boys do.

Notes:

Record here any special item you may wish to recall in teaching the job.

References:

Record here specific references to text, bulletins, reference books and names of farmers.

Enterprise: Any.

Job: Any job approached from informational point of view.

Situations to be dealt with:

List the important ones.

Objectives:

1. To get boys to acquire and understand the information.
2. To get boys to appreciate the importance of the job.

Procedure:

1. Discussion:
 1. Clearly explain job.

2. Bring out community situations.
 - a. c.
 - b. d.

3. Bring out importance of job.
 - a. c.
 - b. d.

2. Problems for study and discussion:

1. Develop with boys.
2. Add additional ones (suggestive questioning)
3. Boys copy these in work book.
4. Teacher gives references.

3. Supervised and outside study:

1. Boys find solutions to problems.

4. Discussion:

1. Discuss problems.

5. Follow-up work:

1. Boys write plan for job or the conclusion reached in their work books.
2. Boys execute job plans.

6. Testing:

1. Teacher examines job plans.
2. Teacher observes boys' work.

Notes:

Record here any special item you may wish to recall in teaching the job.

References:

Record here specific references to text, bulletins, reference books and names of farmers.

Enterprise: Any.

Job: Any managerial job

Situations to be dealt with:

List the important ones.

Objectives:

1. To develop thinking abilities of boys to solve this type of problem.
2. To solve the problem.

Devices:

1. Discussion:
 1. Clearly explain job.
 2. Bring out community situations.
 3. Bring out importance of job or management problem.
 - a. b.
2. Draw boys into analysis of jobs:
 1. Get (a) decisions (problems to be solved); (b) factors; (c) kind of facts needed.
 2. Have boys copy analysis in their work book.
3. Additional problems for study and discussion:
 1. Develop with boys thru suggestive questioning.
 2. Others arising from related and general information.
 3. Have boys copy these in work book.
4. Supervised and outside study:
 1. Boys get facts needed to evaluate factors.
 2. Boys study additional problems.
5. Discussion:
 1. Bring out more important functioning facts.
 2. Evaluate factors, solve problems, and come to conclusion. (Use appropriate black-board devices)
 3. Discuss additional problems.
6. Follow-up work:

(Continued on page 48)



Evening Schools



Three Years of Successful Evening Classes

MALCOLM C. GAAR, Vocational Teacher, Readhimer Agricultural High School, Chestnut, La.



M. C. Gaar

BACK in the fall of 1928, three brief and busy years ago, the first evening class of farmers was organized in the Readhimer community.

This community is situated in the picturesque Natchitoches country of north-east Louisiana, the

old home of the Nakatosh red men, into which the early French explorers went in the 18th century and established the fort, the ruins of which may be seen today.

The first classes would hardly be considered worthy the name were it not that their results have belied the small esteem in which their slight enrollment first placed them. Only 10 farmers enrolled and only five class sessions were held in that first attempt.

Following the usual method of procedure, a community survey of 45 farmers was made and it was found that recognized problems faced the community. Listed on the affirmative side as subjects which must be studied, or else give several reasons why outstanding accounts could not be met at the end of the year, they were: fertilization, varieties, spacing of cotton, cover crops, crop rotation, insects, and proper care and management of livestock.

With this list before us, the question of evening classes as a means of meeting these problems was discussed with the principal of the school, H. R. Sylvest, and other leading men of the community. Result, 10 farmers enrolled for five classes.

As an outcome of this first "primer" class, more high grade fertilizers were bought, more cover crops planted, and, if not more, at least higher figures were inscribed on the deposit slips at the end of the year.

The second year, the farmers began to inquire about the evening class. A farmers' meeting was called for the purpose of letting them decide upon the course to be studied. They again decided to study cotton, but narrowed their problems to these four: fertilizers, varieties, spacing, and insect control. All of the most recently compiled data from the Louisiana Experiment Station and from stations of other southern states was obtained and charted in a very simple manner and presented to the class. Enrollment climbed to an average of 15 for the course.

As an improved practice resulting from the class work of the year before and one that the farmers were well pleased with, the acreage of D. & P. L.

cotton had increased. At the time of the organization of the second class, D. & P. L. 4-8 cotton seed was being distributed and six farmers were able to get enough of the seed to plant a portion of their crops. Other farmers obtained seed from those who had a supply of D. & P. L. 4. As an illustration of the practical uses of an evening class, the class in the Readhimer community served as a medium for distributing these improved cotton seed. Today 95 percent of all the cotton planted in the community is of the improved variety. Almost a community-cotton variety.

Another improved practice which resulted from the evening class was the purchase of a carload of Ama-phos-ko fertilizer for class members. This fertilizer raised their yield from an average of one third of a bale of cotton per acre to approximately one-half of a bale the following season.

Evening class interest increased remarkably by the third year. The livestock is not a major industry in the community, the farmers were interested in livestock as a supplement to general farming, and livestock, especially as related to dairying, was chosen as the subject for class study the third year.

Interested especially in the problems of growing feeds and herd improvement, the class adopted a program with the following divisions: 1, growing concentrates for cows; 2, growing roughage; 3, improving the herd; 4, cattle fever tick; 5, diseases of cattle. Meetings were held once a week over a period of several weeks. And, rain or shine, from 25 to 30 farmers were present for every session.

Immediate results: Six registered Jersey bull calves were procured for the community; the acreage of farm crops including sorghums, legume hays, and grass hays was increased 20 percent. A local cream station was organized and maintained at the school. The members of the class had, with these steps, inaugurated a co-operative, diversified farm program for the community.

As soon as the course in dairying was finished the class was eager to begin another course. Poultry production was selected as the subject for study. These farmers did not want to go into poultry production on a big scale. It was merely that the proper and more economic production of poultry would afford a second supplement to the main business of farming and convert their chicken yards into assets instead of liabilities. Results are not yet available on the poultry projects.

Champion Watermelon Grower

An interesting story in connection with the Readhimer evening classes is that in 1930 the evening study groups produced the champion watermelon grower of the state.

C. E. Bishop, who achieved this rank, chose watermelons as his special project. He put in 2 $\frac{7}{8}$ acres, 2 acres of the improved Tom Watson and $\frac{7}{8}$ acre of a larger melon, Mammoth Triumph. He practiced modern methods of cultivation, giving the vines plenty of space, 15 x 15 feet each way for the Tom Watsons and 20 x 20 feet each way for the larger variety. He used heavy applications of commercial fertilizers both under the plants and as a side dressing. He practiced frequent shallow cultivations thru the summer and also pruned the melons from the vines to control and regulate production. His Watson melons netted him about \$150 for the two acres.

His largest Mammoth Triumph melon weighed 141 pounds. On the $\frac{7}{8}$ of an acre he produced more than 100 melons, 80 of them averaging 100 pounds each. The melons were crated separately and sold to various sections. One melon weighing 126 pounds was sent to London, England; one to Los Angeles, others to different parts of the United States. His net profit on these melons ran about \$5 each.

With the approach of the 1931-32 school session, the Readhimer community is already looking forward to entering upon a fourth year of evening classes and good results therefrom.

Part-Time Class at Wolsey, South Dakota

THE part-time class held at Wolsey, South Dakota, during the past year, started January 9 and met every Thursday evening for 12 weeks.

The class consisted of 23 boys, ranging in age from 15 to 20 years. The average attendance per meeting was 16. Enrollment was obtained by two personal visits to each boy, letters, and newspaper articles.

At the first meeting the boys selected the farm enterprise that they wished to study, which was Dairying. The course was then divided into 11 problems, and one problem was discussed at each meeting. Bulletins from the State Agricultural College were used for study material.

Our discussions lasted from one to one and one-half hours. The conference method was used as much as possible in developing each problem.

For recreation and entertainment the boys played basketball in the high school gymnasium following the discussions.

During 1929-30 there were only 15 teachers in Georgia who did not hold evening classes. This year seven of these 15 teachers have already held such classes. It now appears that every teacher of vocational agriculture in Georgia will hold evening classes during 1930-31.

Put Hay in the Rack and the Stock Will Come In

LAURENCE A. BRADFORD, Flemingsburg, Kentucky

ORGANIZATION. It would be hard to spend too much time in organizing. Plans should begin some months in advance. The plan to conduct an evening course should be announced to the boys day class and their co-operation secured. This may be done in September. If the Department has a chapter of Future Farmers they may have as one of the aims of the year, "To Assist in Conducting an Evening School Course."

The plan and nature of the work should be presented to the head of the School and also to the School Board for approval. This should be done at least two months in advance of the time the course is expected to begin. The teacher is then ready to talk the plan to bankers, commercial clubs, leaders in the community and leading farmers. Don't forget the farmers. They should also be consulted at this time about the enterprise most needed to be studied.

Four to six weeks before the course is expected to begin newspaper articles should be run each week in all papers serving the community. These articles should give the plans, tentative dates, enterprises suggested, history, and so forth, of the work.

Personal visits should be made to farmers and interviews held during the same period of time. A good basis is to attempt to develop transportation for those expected to attend. One is more likely to get a carload of farmers from one section than to get one man. A car load or bus load from each section or locality should be kept in mind.

About two weeks before time for beginning, letters should be sent to a picked list of men explaining the nature of the work and enclosing an enrollment card:

The following card is one used in Kentucky:

Persons Interested in Evening School Work

Name..... Address.....

I am interested in Evening School Work and would like to study:

Tobacco..... Dairying.....

Alfalfa..... Beef Cattle.....

Hays and Pastures..... Sheep.....
Hogs.....

Check but one.

I prefer the course to begin about (date).....

From these cards and from personal interviews the teacher will select the enterprise or enterprises to be studied. The courses may be given singly (one a year); in series (two or more following one another); or simultaneously (two or more running at the same time). Ten farmers is a worthwhile number for work and thirty seems to be about the upper limit. Two or more courses may be run at the same time if leaders for them can be secured. Personally, I like this plan calling it an Evening School

and studying as many enterprises as there is demand on the part of farmers and teachers or leaders to conduct them.

If more than thirty farmers wish to work on the same enterprise they should be divided into classes. There is advantage, however, in having all farmers, regardless of the courses they are studying, to meet at the same time. The county agent, neighboring vocational teachers or other trained agricultural workers may be secured for course leaders. However, one needs to be careful in selecting leaders as few have been trained to teach who also have had both personal experience and technical training in an enterprise.

The teacher will also set a date for the first meeting, after getting in the enrollment cards. The date should be announced thru the papers and by cards or letters mailed to those who are prospective members. These announcements should also give the enterprise or enterprises to be studied, time of meeting, place of meeting and names of enterprise leaders. Do enough work to get out 100 men for each 10 you needed; make the campaign very thoro.

The teacher will make a thoro study of the enterprise to be studied and divide it into ten or more jobs or problems and subdivide each into its important component parts. This he will mimeograph and have copies ready for the first meeting.

Operation. We have a saying "Put the hay in the rack and the stock will come in." This is a good thought for one directing an evening course. Always he must have "Hay in the rack," and it must be of the best grade, nutritious and palatable. No one is forcing these farmers to come. They come only upon inclination. The teacher must, therefore, be at his best all the time.

At the first meeting some school board member or the school superintendent may deliver a short address of welcome. Following this the teacher will set up the general material relating to the enterprise, such as importance in community, trends, relation to farming program, need for improvement, and the like. Charts and other illustrative material will be used.

At the first meeting the group present is asked to work out a list of the problems of the enterprise. These are put on board. The skillful teacher will draw these problems from the men and arrange them on the board practically identical with the list he has previously worked out. He may then distribute his own mimeographed copies, offering it as a suggested list for consideration. The list should be changed if needed and adopted by those present. I believe it is well to make plain that only those points here agreed upon will be studied during the course. The problem for the second meeting can then be assigned for study and material given out for reading.

A president and secretary may then be elected from the group and the farmers permitted to decide frequency of subsequent meeting, time, and so forth. The secretary can keep the roll of each meeting and record the questions and a

many of the study and discussion. The farmers should not be held formally for more than 1½ hours and the meetings should begin and end promptly.

Before the second meeting the teacher will do four things: (1) Write newspaper articles about the first meeting. (2) Prepare mimeographed summary outlines of all the material presented at the first meeting. (3) Prepare for the next meeting. (4) Send out some more letters and cards and make telephone or personal calls to those whom he believes should have been at the first meeting. This will keep him rather busy, especially if he has more than one meeting a week or more than one section at each meeting.

For subsequent meetings he will have the same work between times of meeting. When a member is absent he may be called, visited or written a personal card, telling him that he was missed and that it is hoped he can be present at the next meeting. People like to know that they have been missed. It is only human nature. During our last evening school more than 600 letters and cards were sent out to secure and keep up attendance. The attendance was 408 farmers at 11 meetings.

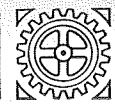
Entertainment. At each meeting, or at some of them, five minutes or so may be used for entertainment. This can be put on by the boys and girls of the school.

At each meeting one or two farmers who have had successes should be called upon for three to five minutes talks on specific points. The meetings should be businesslike and earnest at all times, keeping hard on the point under discussion. Questions and discussion should be drawn from the men. If material is to be presented by the teacher it should be secured from them if possible and presented in charts, graphs, pictures, and the like. I believe that well selected bulletins and newspaper articles or parts of them should be given out at each meeting for study and discussion. A good assignment here is worth as much as a good one for all day work. In our courses at the Flemingsburg School we try to assign the problem at the preceding meeting, study it during the meeting given to it and review it at the first of the succeeding meeting.

Directed Farm Practice. Each farmer may be asked to carry out some directed farm practice on the enterprise studied. Expense, labor and income accounts should be kept of the practice and a summary made. Observations and experiences should be noted. A Farm Tour may be arranged for the members at the most opportune time following the course. Some of the outstanding pieces of work will be visited. It may be advisable to call in the members a few months later for record work. This is especially recommended for those who have held courses in Farm Management or for summarizing cost accounts on some enterprise.

At the completion of the meetings a banquet may be arranged for the farmers and their wives. At this meeting certificates for high attendance at meetings may be awarded or other good records recognized in some way.

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Suggestions for Beginners in Farm Mechanics

M. A. SHARP, Agricultural Engineering, Iowa State College

IT IS probable that the agriculture teacher starting his first year has more difficulty organizing the farm mechanics course than any other division of his work. This may be due to a lack of training, but in most cases it is due to the variety and type of work to be given and the lack of standardization of subject matter and equipment. A few suggestions based on experiences of a large number of teachers may be of some benefit. A teacher should not come into any school with an exact outline which he expects to follow in detail. The needs of the community must be considered if his work is to be successful and while his general outline should be adaptable to his conditions, details must vary according to local needs.

Organizing the Shop and its Equipment

As a rule, the teacher cannot make a material change in the floor space available, but in many cases he can improve the efficiency of the area by rearrangement of benches, tool cases and equipment. Most farm mechanics teachers are agreed that where possible, it is best to arrange the benches in a continuous row along the walls. In nearly every shop, the storage space could be improved by using the area under the benches. If the manual training type of bench is in use, it may be boarded up all around and doors put on the front side. Built in benches will give more satisfactory service than commercially made benches in most cases. The built in benches have many advantages from an efficiency standpoint as well as being cheaper.

Unless the shop is equipped with one set of tools for each individual, it is usually best to have general tool cases. It is seldom advisable to purchase sufficient tools so each boy may have a complete set. Probably every boy should have a claw hammer and other tools might be about as follows: Crosscut saws—one for each four boys, rip saws—one for each six boys, framing squares—one for each four boys, jack planes—one for each four boys. These have to do with wood-working only and tools for other types of work usually are not bought in excess of requirements. Storage of supplies does not constitute a serious problem. All small articles may be kept in the bottom part of the tool case if it reaches the floor, or in one of the benches. The lumber rack may be built along the wall above the benches or suspended from the ceiling. It is not necessary to stock much iron so it may be kept with the lumber in a separate division of the rack.

Outlining the Course

Suggested outlines of the course of study are available from most states

and from several other sources. Such outlines are meant to be suggestive rather than to be followed in detail, in most cases. The type of farming in a given community should be the largest factor influencing the type of work to be given, and the instructor should study his local conditions carefully. The tendency is to devote far too much time to wood-work and to give practically all of the time to construction. Every study that has been made regarding the needs of a farm community, shows very clearly that farm mechanics should consist largely of repair work and that wood-work is a very minor part of a farmer's mechanical jobs. Teachers are inclined to over-emphasize wood construction because it is easy to teach. The equipment is usually available and precedent has more influence than present needs. A teacher should make a careful summary of local conditions by conferences with leading farmers, hardware, implement, and grain dealers, bankers and school officials. Giving the community what it needs is the surest way to success.

Selecting the Jobs

After making a general outline of the course of study, the real difficulty comes in selecting jobs which will be appropriate. Every person, in deciding whether or not to do a certain job, should consider the following questions:

1. Will it save time?
2. Will it save money?
3. Will it save labor?
4. Will it give me a feeling of satisfaction?
5. Does it require too much equipment?
6. Is it too difficult for me to do?

After considering each of these and balancing up the answers, he decides whether or not to go ahead with the job. The same questions can be applied to every piece of work which is mentioned as a possibility in the shop. These are to be answered from the boys' viewpoint. From a teacher's viewpoint, the job must teach certain abilities and knowledge which he wants the boy to learn and if a job has no teaching value, it should not be used. Another type of score card widely used for selecting teaching units has for its main headings the following points:

1. Is the job worth while for the boy?
2. Is it interesting to him?
3. Is it clear and definite?
4. Is it of proper scope and difficulty for him at the present time?
5. Does it require thinking of good quality?

The best source of jobs is the boy's

home farm, and it is well to have him make a list of all of the things he would like to do during the year. He should make out this list after consulting his parents and considering carefully the needs of his home farm. The teacher may then help him arrange this list in order of difficulty and importance. While it is true that perhaps half the instruction may be of a definite type, and half the jobs may be required of all boys, certainly considerable time is due the boy for work on jobs in which he is especially interested.

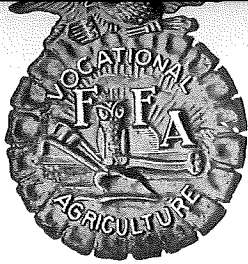
Methods of Teaching

The primary purpose of all teaching should be mental development of the boy and this should be remembered in shop work as well as in other subjects. While many teachers have considered the development of skill in the use of tools as the final objective, it is becoming more and more recognized that we cannot afford to take time to develop much skill. We can give the boys some mechanical abilities as a means to our end which should be the development of his mental ability along mechanical lines. There is very little value in giving a boy a blueprint and asking him to construct the article. It may be desirable to give him a drawing, or other means of suggestion, but so far as possible, he should make the final design himself and work out all the problems to be met in constructing the project. If our farm mechanics work is to deserve a place in our school system, we must have "less bench and more brains." While the problem or project method of teaching is more difficult for the teacher, it is also of more benefit to the student and every teacher should attempt so far as possible to have the boy solve his own problems. It is the boy's brain rather than the teacher's that we hope to develop in farm mechanics courses.

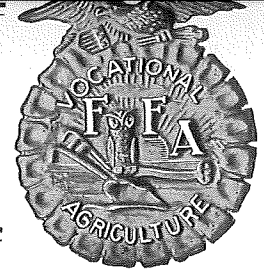
Some New Reasons for Dissatisfaction With Current Project Accounting

(Continued from page 43)

Alexander, and Jeppson. The writer has heard no leader in our field comment on project accounting in the past five years who has not admitted that we are "in a mess." We are working our way out in some states, it is true, but it is doubtful whether we have yet even fully determined the reasons for the situation in which we find ourselves. Too little attention, it seems, has been given to the kinds of records to be kept and their uses after being kept. It is along this line that this series of articles may make some contribution.



Future Farmers of America



Keith Rhodes of Utah Wins Second Annual Pacific Regional F.F.A. Public-Speaking Contest

W. T. SPANTON, Federal Agent, Pacific Region

THE Second Annual Future Farmer Public Speaking Contest for the eleven States in the Pacific Region was held in Boise, Idaho, on Tuesday night, May 19th, in the Boise High School Auditorium. Each of the 11 states was represented this year and had a boy entered in this contest who had previously come thru statewide elimination contests.

The program started at 7 p. m., and the local chapter of the F. F. A. provided a short musical program, consisting of selections by the high school quartet. The judges for this contest were Major E. A. Smith, Editor of the Pacific Farmers' Trio of Spokane, Washington; Dean E. J. Iddings of the College of Agriculture, University of Idaho, Moscow, Idaho, and Mr. James K. Wallace, Marketing Specialist, United States Department of Agriculture, Washington, D. C.

The general quality of the speeches both from the standpoint of content and the manner in which they were presented showed great improvement over that of last year's contest and it was not without considerable difficulty that the judges were able to arrive at a final decision. Keith Rhodes of the Bear River High School, located at Garland, Utah, was finally selected as the winner of the regional contest. The subject of his speech was "What the Future Farmer Organization May Mean to American Agriculture." The boy who was selected for second place in the contest was Eugene Olson, of Pinebluff, Wyoming, who spoke on "The Mechanization of Agriculture." Devere Tovy, of Malad, Idaho, won third place in the contest and spoke on "The Equalization of Taxes As a Farm Relief Measure."

A great deal of interest was manifested and a large crowd gathered at the Boise High School Auditorium to hear the contest, and in spite of the fact that it continued for about two hours and a half their attention was excellent.

By virtue of the fact that Keith Rhodes of Utah was declared the regional winner, he will be the official representative of the Pacific region in the final National Future Farmer of America Public Speaking Contest that will be held in Kansas City in November at the time of the National Congress of the Future Farmers of Amer-

ica. At that time his entire traveling expenses and hotel bills will be paid to Kansas City by Senator Arthur Capper, of Kansas, who is the sponsor of the National Contest, and, in addition to this, the boy who wins first place in the national contest will be awarded a prize of \$400 in cash and the boys who win second, third and fourth places will be awarded \$300, \$200 and \$100, respectively. The final national contest will be broadcast over the National Broadcasting Company's coast to coast network of broadcasting stations.

Colby F. F. A. Has Novel Scheme

THE Colby (Kansas) chapter, F. F. A., has hit upon an idea for advertising its existence as well as for recording individual achievements of its members which is as novel as it is original. This idea embodies the use of canes which, according to the Colby "Hi-Life" have long been popular with stock connoisseurs the country over.

The canes to be carried by the Colby Farmers will not be ordinary canes, however, but will be adorned with colored stripes symbolizing the specific achievements of its "wearer."

Each boy who belongs to the Colby chapter, the "Hi Life" explains, will be eligible to own one of these striped canes.

The cane is black trimmed with a belt of green just below the crook, when carried by a Green Hand member. When the Green Hand becomes a Future Farmer the green stripe is narrowed and just below it is added a belt of red. If he is raised to the rank of State Farmer, a white stripe is added below the red. Then, if the State Farmer becomes an American Farmer, the highest degree of F. F. A., a belt of blue is added. These bands cover a space of two inches just below the crook of the cane. The highest degree band always covers the major part of this distance, leaving only a one-half inch strip for lower degree bands.

If, at any time during his agriculture course, a member wins a letter by being on a judging team, he paints the crook of his cane orange, thus con-

verting it into an orange "C" for Colby. A belt of orange is added below the degree stripe for each judging letter won.

In addition, Mr. Fort, the chapter adviser, is offering a gold headed cane for the outstanding Future Farmer member of the Colby chapter. This award is given on a consideration of the following points: Scholarship, 25 points; project achievement, 25 points; extra curricular vocational activities, 20 points; leadership, 10 points; other extra curricular activities of the school, 10 points, and character, 10 points. When this award is made, the boy will present his cane to the school. An oval picture of the boy will be placed in the crook and this cane with the picture and achievements stripes will be hung in the vocational agriculture room as a memoir to that student. A record of achievement will be placed on the reverse side of the picture.—From Oregon Future Farmer.

Utilizing Project Records to Stimulate Interest and Pro- vide Problems for Class Work

(Continued from page 44)

the boys are prepared to get maximum results. For instance, some little time before it is necessary to insert the data on "kind of pasture" the boys can study the problem to determine the best kind to use. Later, a record will be made. Finally, when the pigs are grown and marketed, the comparisons will have all been made, and the records evaluated. Even then, there will be many opportunities to check back to determine the causes of success or failure and the completed charts may be used as reference by future students.

The accompanying charts are offered merely as illustrations. It will be seen, of course, that they are made to fit local enterprises and conditions. The teacher who makes use of similar ones will find greater interest developing in project problems, competition will be keener, records will be more carefully kept, and the boys will strive harder to make their projects successful. Even, if but two boys are carrying projects in one enterprise, there is still a chance for worthwhile comparisons.



Kenneth Pettibone

TO GIVE an intricate account of a trip, such as I have experienced during the last two months, would be like the assembling of an atlas of the world. Therefore for the sake of brevity, I am limiting this letter within the bounds

of the Hawaiian Association of Future Farmers.

To begin with, the agriculture of the Islands is largely carried on under the plantation system. These plantations are incorporated stock companies which we would term corporation farms. They handle large tracts of either sugar cane or pineapple, varying from five to fifteen thousand acres. The investment per acre in equipment is so high and the crops must be handled in such a manner that it would be very difficult to organize a system of individual farmers that would be as efficient as is the present system. The plantations are associated together in either the Hawaiian Sugar Planters' Association or the Hawaiian Pineapple Planters' Association, which is the last word in efficient marketing machinery. Individual farming is carried on to a small degree in the coffee section of Kona and to a smaller degree in the pineapple and cane, and will no doubt always remain in the minority.

The students of agriculture are from the families of plantation workers and have limited facilities for individual projects because the homes, together with a small area of land, are furnished by the plantation. Some of the boys have intensified on these little plots of ground and have their minor projects in garden, tropical fruits, poultry, and swine. These individual projects are carried on in conjunction with a major project with the class group.

The Smith-Hughes departments are carried on under two different plans, referred to as the type A and the type B. The "A" plan is used in elementary schools in the seventh and eighth grades and the "B" plan in high schools just as it is here. Under the "A" plan both academic and laboratory work are given under the same supervision. One group will work in the fields for a period while the other group is in the class room. Generally they alternate every one or two weeks, spending about half of the year in the field and half in the class room.

These group projects contrast greatly with what we have here. The entire department or perhaps a certain class will contract with a nearby plantation to grow a certain acreage of cane or pineapple or to carry on certain field operations connected with a particular tract. The boys in elementary schools generally get returns from one crop and the high school students from two.

The entire school system is on more of a vocational basis than are the schools here. The grade schools would

compare with high schools and the high schools with trade schools or junior colleges. The plantations are seeking the products of the Smith-Hughes departments and the Smith-Hughes shops are supplying most of the skilled workers in the mills and canneries.

There are 17 chapters in the Islands besides a number of trades and industries departments. The membership in the Territorial Association is a little over 600 with an ever increasing trend. The boys are largely Oriental, consequently different than here, but are very active, intelligent, and industrious. On becoming acquainted, you would find these boys "real fellows" and essentially the same as any students. They gave me a wonderful welcome wherever I went and I hope that each of you will take it upon yourself to do the same for their representative, Wilbert Choi, when he returns the visit.

Wilbert is a senior in the Leilehua high school, where he is one of the outstanding students. He is a member of the football, the basketball, and the baseball teams; is president of the local chapter; was president of the Territorial Association for one year; and has been entered in oratory. His father is employed in the shops on the pineapple plantation and he and his brothers are employed by the same concern.

Wilbert is of Korean descent, has a most attractive personality, and is a fellow with whom I am sure you will be glad to make friends.

Iowa Falls Ags Go Traveling

PAUL I. BARKER, Vocational Teacher,
Iowa Falls, Iowa

JUST as school was closing for the year the Future Farmer chapter of Iowa Falls called a meeting. It was well attended; and why not, for the boys had met to plan their summer activities. They planned a Summer Project Tour, a Tour of Iowa, a meeting of the hog men of the chapter and a F. F. A. party where they could bring their lady friends. The Tour of Iowa, the Project Tour and the Party have become history and now I want to tell just a little of the trip over our state.

July 10th, a hot Friday morning, a few fathers and mothers and a boiling hot sun witnessed the departure of 10 vocational agriculture students and their teacher for parts unknown to them. Their three day trip took them thru central Iowa by way of the state capitol, Des Moines, Council Bluffs and Omaha, Neb., and back over the well known trail, the Lincoln Highway. Visits were made to:

1. Manley & Anderson farm, Bondurant, Iowa. Raisers of P. B. Durocs.
2. Ralph Clappitt farm, New Providence, Ia. Breeders of high class Milking Shorthorn Cattle.

3. State Capitol building where we met, Miss Agnes Samuelson, State Superintendent of Public Instruction; Mark Thornburg, Secretary of Agriculture for Iowa; George Ekstrom; H. T. Hall, Vocational Agriculture Supervisors; F. E. Moore, State Director for Vocational Education.

4. The State Historical building.
5. Two of the entertainment parks of Des Moines, where we met the employees of the postoffice of Des Moines and played them a game of kitten ball.

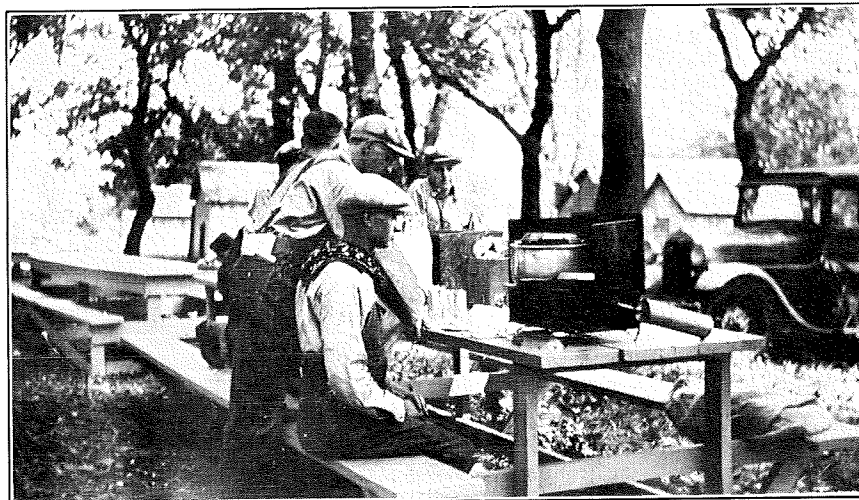
6. The Grape section of Iowa among the hills about Council Bluffs, Iowa.

7. A Vocational Agriculture student and his projects at Woodbine, Ia.

8. A drive over the city of Omaha.

- (1) Omaha Union Stockyards.
- (2) Several of the packing plants.
- (3) The residential districts.
- (4) The industrial sections.

Thruout the trip the boys slept in a tent, prepared their own meals, and made most of their good times. They had the usual experiences of running into a big rain in hilly, greasy clay country; tire and engine trouble; getting lost; but this only made the big watermelon taste the better on the way home. They all arrived home at the appointed hour, not a cold in the crowd, everybody happy and already planning for a trip when another summer rolls around. The boys saw lots of new country, met new and strange people, learned a little more about how to work and play together and got lots of fun out of other things besides spending money. Their 600 mile trip cost them each a little less than \$5.00, and *what a time they had.*



Iowa Falls Boys Take Iowa Tour

Preparing the spuds, the thick juicy steak, the beans and tomatoes for a hungry crowd who had spent their entire morning barefoot, pushing and pulling their cars and trailer up and over the slippery, long, steep hills of clay in southwestern Iowa. The only advantage the boys saw to this land compared to the flat prairie was that both sides of the land could be farmed if it could be held in place

Criteria of Methods for the Teaching of Facts, Principals, Standards, Ideals, Attitudes, and Skills of Farm Life

(Continued from page 39)

tion and use is expensive to the learner in time, energy, and materials and may result in dissatisfaction if unsuccessful. The vocational agriculture teacher should conserve the time and energy of the learner and avoid possible loss of interest and the development of unfavorable attitudes by directing the activity of the learner in the acquirement of the desired knowledge, attitudes, and skills. If such directing be carefully done, the interest and activity of the learner can still be retained. The waste of unguided learning should be avoided in vocational teaching.

e. *Criterion five.* That the facts, principles, and techniques be dealt with vividly and purposefully in order to be useably remembered.

An item of experience is vividly dealt with to the degree that the learner is attentive, interested, and purposefully motivated. There must be a definite set of mind for the acquirement of that particular item of experience. The responses of the learner to a teaching situation are apt to be satisfying and the learning to be reinforced, if the results attained fit in with the purposes and needs of the learner. Thus attentive and purposeful reaction by the learner is a vivid means of acquiring and fixing the desired behavior pattern and of giving some assurance of an attitude for using such items of experience in life activities. The vocational teacher must rely upon definite, vivid, active, satisfying response by the learner in the various teaching situations used.

f. *Criterion six.* That the learner should deal with the facts, principles, and techniques frequently and in numerous situations so as to assure remembrance.

The vocational agriculture teacher has opportunity for the use of repeated activity in varied situations and should make full use of such for the development of the desired behavior pattern. He has real life problems of the learner available for use and should set teaching situations so that the learner actively, attentively, purposefully, and frequently deals with the learning content for the meeting of his life problems. The use of such active, purposeful, frequent teaching situations will result in worthwhile farming habits and promote a permanent change in the behavior pattern of the individual.

The vocational agriculture teacher needs to select carefully the content used and then organize the teaching situation so as to have activity on the part of the learner. The aims and objectives, the content, the organization and the method of the teaching situation used in vocational work need careful consideration if the desired educative change in the behavior of the learner is to result. The selection, organization, and arrangement of the content and procedures used in vocational teaching is very significant. The vocational agriculture teacher has the advantage of teaching in real life situations and in dealing with real life problems and

should use methods which stimulate the desired activity and resultant learning on the part of the farm people. Good method on the part of the educator stimulates motive, activity, and achievement in the learner which results in the desired educative change. Situations for active and satisfying discovery and situations for active and satisfying use of the facts, principles, standards, and techniques are necessary for effective results in vocational teaching. Only by effective and satisfying use of the knowledge can the educator expect the learner to secure the requisite attitudes or mind-sets which promote permanent change in behavior. The measure of success in vocational teaching is in large part dependent upon the number of farm boys and farmers in the area actually following the proved superior facts, principles, standards, ideals, and techniques of farming.

Supporting Our Representatives

(Continued from page 34)

which each vocational teacher can express himself in both state and national problems. Even if his motives were entirely selfish he could afford to give the American Vocational Association his strongest support. It is in times of economic, social and civic unrest, now being experienced, that group interests clash and the need of energetic, virile organization is strongest.

Thru years of close contact with the leadership in the American Vocational Association, we can state, most emphatically, that our national organization stands for more than the furtherance of selfish interests. It is endeavoring to make a practical reality that favorite educational principle of educational convention speakers "That to every man, woman and child in this country there should be given that peculiar opportunity for education to which residence in a democracy entitles them."

Whether you are selfish or unselfish in your thinking the American Vocational Association deserves your support. Not all of us can engage in legislative activities, participate in national programs or have the opportunities for membership on national committees. Each vocational teacher, supervisor and director can give support to his organization thru his membership.

As vice-president of the American Vocational Association representing agriculture, we are especially anxious that each vocational teacher in the United States make two national investments, first membership in the national organization which represents him, second, subscription to the *Agricultural Education* magazine, whose columns the editor has permitted us to use in bringing this message to you. Interest rates on financial investments may be falling, but we can assure you of constantly increasing returns from your investments in an A. V. A. membership and an *Agricultural Education* magazine subscription. Every state association of vocational agriculture teachers should set as its goal, 100 percent membership and 100 percent subscription. —Ray Fife.

Put the Hay in the Rack and the Stock Will Come In

(Continued from page 42)

If the meetings are well planned and interesting material presented, good discussions developed and sound conclusions drawn, the members will feel that they are worth while and will hold a debt of gratitude for the teacher and his assistants. Each meeting will have given them a sound practice procedure on some one point. If the teacher does his best in organization and conduct of meetings his courses will succeed. Enough work for 100 men is certain to get ten and this is about as much as one may reasonably expect. Ten men will make a very worthwhile class.

Note: Copies of forms and other material used may be secured by writing Mr. L. A. Bradford, Flemingsburg, Kentucky.

Teaching Plans in Vocational Agriculture

(Continued from page 40)

1. Project workers make plans for job.
2. Other boys write conclusions reached in class.
7. Testing:
 1. Check plans of project workers.
 2. Observe what project workers and other boys do with the job.

Notes:

Record here any special item you may wish to recall in teaching the job.

References:

Record here specific references to text, bulletins, reference books and names of farmers.

Regional Speaking Contest

MR. STIMSON reports to Regional Agent A. P. Williams that arrangements have been completed for the use of the "Old Church of the New England Village" on the Eastern States Exposition grounds for the Regional F. F. A. Prize Speaking Contest. This is scheduled for Friday, September 25, 1931 at 2 p. m. As the dairy cattle judging contests will probably occur in the morning of the same day, we hope to furnish an interested audience for the speaking program.

Future Farmers Booster Song

(Tune: "Old Grey Bonnet")

Pull off your coat and collar
Get to work and push and holler
And we'll put Future Farmers on the top,
Every booster boosting,
Not a rooster roosting,
We will never, never stop.

—From Iowa F. F. A. Song Book.

"The more I am acquainted with agricultural affairs the better I am pleased with them: insomuch, that I can now where find so great satisfaction as in those innocent and useful pursuits."—George Washington.