Potato Show.—As a result of several very successful potato projects, we have taken all the prizes in the vocational agriculture class at the Ohio Potato Show, during Farmers' Week, for the past two years.—Paul H. Smith, Reporter, Fredericktown, Ohio.

Pennsylvania Boys Make Money Producing Plants

GREGG Township Chapter, at Spring Mills, Pennsylvania, has carried on several class projects in vegetables in order to raise funds for school purposes. Following is a brief explanation of one of the projects:

The members constructed a concrete hotbed 30 x 6 feet in which they grow each spring early cabbage, celery, cauliflower, and tomato plants. The hotbed is managed by the class in gardening. The returns range from $20 to $60 annually. The hotbed is started the last week in February and kept in use until May 30. The chapter also has two cold frames that help out during the rush season. The price charged per dozen are: cabbage, 15 cents; tomato, 25 cents; celery, 15 cents; cauliflower, 15 cents.—J. W. Decker, Instructor.

An Exchange Department

About a year ago an exchange department was organized by the Oshkosh Chapter, Wisconsin, for the purpose of exchanging products in the agriculture department. It was started with the idea of selling grains, etc., that were grown in the department. There was such a call for other products that we bought large quantities of commercial fertilizers, spraying materials, Black Leaf '40', dsinfectants, lawn seeding, seed potatoes, and miscellaneous articles. By buying these in fairly large quanitities, we were able to obtain them at a much lower cost than the merchants of the town could sell them in small quantities, and thus realized a saving for those buying these items. Whenever anyone has anything for sale, he places a sign on the bulletin board, stating the nature of the item for sale. A sign is also placed here if anyone wishes to buy items within reach of the Exchange epartment.

F. F. A. Book Store

THE Strong Chapter of the F. F. A. had reached the point where something had to be done to raise money for carrying on the activities of the Chapter. With the advice and assistance of our agriculture teacher and principal we worked out the idea of a school book store. The principal gave us a room in the basement of our new school building for our book store. We found a company that would sell us school supplies on time at a very reasonable price. We are carrying a regular supply of note book paper, pencils, ink, tablets, etc. One boy has charge of the store for one week. At the end of the week a complete inventory is made, and every item must check.

We hope to secure enough money from this source to go our part in a county F. F. A. cabin to be constructed at

Agricultural Bulletins

Beef-Cattle Production in the Range Area. Revised January, 1933. (Farmers' Bulletin 1395.)

Dairy Farming for Beginners, Revised January, 1933. (Farmers' Bulletin 1610.)

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The Angora Goat. Revised November, 1932. (Farmers' Bulletin 1203.)

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Sweetpotato Growing. Revised December, 1932. (Farmers' Bulletin 999.)

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Simple Way to Increase Crop Yields. Revised. (Farmers' Bulletin 924.)

Using Soil-Binding Plants to Reclaim Gullies in the South. (Farmers' Bulletin 1697.)

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Deciduous-Fruit Improvement through Tree-Performance Records. 1933. (Farmers' Bulletin 1696.)

Peach Brown Rot. November, 1932. (Technical Bulletin 328.)

Currants and Gooseberries, Their Culture and Relation to White-Pine Blister Rust. 1933. (Farmers' Bulletin 1398.)

Strawberry Culture: South Atlantic and Gulf Coast Regions. Revised (Farmers' Bulletin 1026.)

Strawberry Culture: Western United States. Revised 1933. (Farmers' Bulletin 1027.)

Blackberry Growing, Revised December, 1932. (Farmers' Bulletin 1399.)

Making Woodlands Profitable in the Southern States. Revised December, 1932. (Farmers' Bulletin 1071.)

Radio and Vocational Agriculture in Iowa

[Continued from page 167

learn of the progressive projects which their neighboring teachers are directing, and develop a larger group consciousness as a result of working together with other instructors in a common cause.

In the fourth place, in deciding on what to present, each instructor must evaluate his own program, decide what its most important phases are, what he is doing best, and what his patrons and the general public will be most interested in hearing about.

Fifth, not only are instructors becoming better acquainted with the nature of the vocational agriculture programs in other departments, but so are the students. Students develop an awareness of their own position in a large achievements of other boys in similar work.

Lastly, this broadcasting experience is excellent training in written and oral

functions over the presentations, the talks or dramatizations are invariably written and rehearsed before being presented. The men and boys realize that they have only a few minutes to present their messages. The manuscripts must be carefully constructed, the vocabulary must be suitable, and the English impeccable.

It may be that the experience which students get in preparing for and giving radio presentations may prove to be a valuable preparation for their future activities as leaders of a better rural life.

Where Boys Conduct Their Home Projects

[Continued from page 169

if the only practical farm experience they are giving them is in back-yards and on vacant lots. I deduct this anticipated trouble from the following newspaper clipping.

DIFFERENCE IN METALS LEADS TO JAIL

Pair Say They Paid to Learn Steel Welding Taught With Tin

Difference between structural steel and tin of the tomato can variety is the reason why William R. Baudette, 5150 Ogden Street, went to jail yesterday.

Baudette, it is charged, accepted fees in return for instructing two Denver men in structural steel welding. Instead, his training was limited to showing his pupils how to make small articles from tin, they asserted.

E. H. Greeder, 1055 Clarkson Street, and Charles Ewert, 760 Pennsylvania Street, paid Baudette $75.00 and $40.00 respectively, for instruction in steel work, they asserted. When they found, they said, that the course was confined to tin craftsmanship, they swore out a warrant in justice of the peace court against Baudette.

He is facing charges of operating a confidence game.

Part-time Work in Baldwin, Wisconsin

[Cotinued from page 173]

time group. This course has been an outgrowth of what we had last year. The work has been entirely on an individual basis, each boy working on what he wanted to. The enrollment has been large with 47 enrolled and an average attendance of 30. The boys work in groups, doing a large variety of shop jobs. The work has covered tool sharpening, soldering, blacksmithing, harness repairing and oiling, gas engine repair, machine repairing, rope splicing, and knot tying and belt lacing.

I have found that by meeting the group twice a week the interest runs higher, and we are through before bad roads and bad weather starts.

I have had an average of 42 farm boys regularly enrolled in my all-day classes, but I find that I have made contact with just as many boys not attending high school through part-time

VOL. V JUNE, 1933 No. 12

Agricultural Education

Farm Home of an Illustrious Farmer
The Farm Home of Thomas Jefferson
(See editorial page)

"To learn anything we must somehow practice that thing."—William Heard Kilpatrick

EDITORIAL COMMENT

A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by the Meredith Publishing Company at Des Moines, Iowa.

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Subscription price, $1 per year, payable at the office of the Meredith Publishing Company, Des Moines, Iowa. Foreign subscriptions, $1.25. Subscriptions terminate January 1 or July 1. Single copies, 10 cents. Contributions should be sent to the Special Editors or to the Editor. No advertising is accepted.

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

FARM HOMES OF ILLUSTRIOUS FARMERS

BEGINNING with this issue of the Agricultural Education Magazine, there is to be presented a series of cover pictures showing farm homes of illustrious farmers. As we see it, this series is timely. It fits in with our concept of farming as a mode of living as well as a method of making a living. It fits in with the theme of illustrious farmers being dealt with by the Future Farmers of America. It helps us to realize that farming vocations are noble.

For this June cover we have selected the farm home of Thomas Jefferson, known as Monticello. This home, considered by many architects and artists one of the most beautiful homes in America, was designed by Jefferson himself and built under his personal supervision. He laid out the spacious lawns and planted the original trees. The woodwork was made from timber taken from Monticello.

As a boy, Jefferson looked up to the hill top above Charlottsville, Virginia, and had a dream of the day when he could there build a home. To the building of that home he brought his perfect taste. He put into that home the riches of his mind and heart, and there he took his bride, and there were born his children. It was here that he spent the years of his retirement on leaving the presidency. However far he wandered from its hearth, his heart was always yearning for its beauty and serenity.

It was here Jefferson died, and here he is buried. Here is the Jefferson family burial plot with the graves of Jefferson's mother, wife, children, grandchildren, and other members of his family, including decendents down to the present day.

Hundred of F. F. A members will make the pilgrimage to Monticello early in June and will see the farm home of this illustrious farmer.—C. H.

F. F. A. PILGRIMAGE JUNE 12, 13, 14

THE F. F. A. Pilgrimage to Monticello, the National Capital, and Mount Vernon is set for June 12, 13, and 14. Hundreds of F. F. A. members from the 48 State Associations are expected to be in attendance at this three-day meeting to be held in Washington, D. C., and Charlottesville, Virginia. The event is designed primarily to honor Thomas Jefferson, one of the "Patron Saints" of the organization.

At the Fifth National Convention of Future Farmers of America, held last November in Kansas City, Missouri, the delegates present from 38 States voted unanimously to accept the invitation of the Thomas Jefferson Memorial Foundation to dedicate a room in Monticello, Jefferson's home, to the ideals of the Future Farmers of America. It was left to the National Board of Trustees to work out the plans for the dedication. After months of study and preliminary planning, it was decided that a pilgrimage in which the members of the F. F. A. would have an opportunity to visit the Nation's capital, the home of George Washington, and the home of President Vernon Howell of Guymon, Oklahoma, in speaking of the coming pilgrimage, summarized its value to the membership as follows: "A wonderful opportunity! Here you will learn more of the spirit upon which the F. F. A. was organized, participate in the dedicatory exercises, develop friendships with other Future Farmers, and at the same time have a wonderful educational trip in the most historic spot in the nation. A real treat from the day you leave home until you return!"

In attempting to carry out the wishes of members in connection with this pilgrimage, the following brief sketch of the general plan should be of interest.

F. F. A. boys, with their advisers, will come to Washington by train, bus, and private auto, arriving there during the afternoon and evening of June 11. Ample housing accommodations in hotels and tourist camps at low rates have been provided for, thru the Greater National Capital Committee. The pilgrimage lasts three days, two of which will be spent in the Nation's Capital, and the third day at Charlottesville, Virginia, where Monticello is located.

During the first day, June 12, these young patriots with an abiding faith in the future of agriculture, will gather at the Washington Auditorium for registration and a formal meeting. Here they will be greeted by men of national reputation. Later in the morning they will visit the White House. That afternoon a journey will be made to interesting old Mount Vernon, the home of George Washington, who is also one of the "Patron Saints" of the organization. In the evening special entertainment features are to be provided.

June 13, the second day of the pilgrimage, will be given over to a visit to Congress and a tour of the City of Washington. For the first time, and perhaps the only time in the lives of many of the Future Farmers of America attending the pilgrimage, they will see the wonders and the beauties of nationally historic points, so important in the development of our nation.

On Wednesday, June 14, Flag Day, all of those attending the pilgrimage will journey 130 miles south of Washington to Charlottesville, Virginia, in order to pay tribute to Thomas Jefferson. Appropriate exercises will be held that morning in the amphitheater of the University of Virginia. It is hoped that radio greetings will be extended by the President of the United States. Prominent men, including the Secretary of Agriculture and the Governor of Virginia, will participate. At noon a barbecue dinner will be served. During the afternoon of June 14 the high point of the pilgrimage will be reached. Winding up the hill to Monticello, the Future Farmers of America will hold a special flag ceremony in keeping with the spirit of the day and will dedicate the South Sun Room of Jefferson's home to the ideals of their organization. In so doing, they will be paying tribute to Thomas Jefferson, the scientific farmer.

The pilgrimage—which is to be educational, inspirational, and recreational—offers a rare opportunity to the farm youth who are members of the Future Farmers of America. At least one representative from every State Association of F. F. A. is expected, and every F. F. A. member who can possibly do so should plan to attend.—W. A. R.

BALANCED BUDGETS and UNBALANCED LIVES

"IT IS quite as important to balance the nation's life as to balance the nation's budget. It is quite as important to prevent a social deficit for the future as to wipe out a financial deficit in the present."

"In a phase of a crisis, there is always a flare-up of superficial and sinister criticism of the schools by demagogues who are willing to play horse with anything they think they can capitalize to their personal or political advantage."

"The public has a right to an education it can afford."

"It is possible to be as short-sighted in administering economy as in allowing extravagance. . . . . The highest economy is productive investment, whether it be the funds of a person or the taxes of a people that are involved."—

Professional

Contribution of W. H. Kilpatrick to Agricultural Education

A. M. FIELD, University of Minnesota

A. M. Field

THE program for teaching vocational agriculture in the public schools is still in its tender teens, but it has during this brief period identified itself in a tangible way with the process of evolving a new deal for education. The major contribution that agriculture is making to the new education or a changing civilization lies in the practical nature of the learning activities, the shifting of emphasis from subject matter to the students and their life activities, and the humanizing and individualizing of the learning activities of students. To this conception Dr. W. H. Kilpatrick has contributed generously through the influence of his philosophy of learning and teaching, through his interpretation of the philosophy of education, and through his activities as a master teacher.

The new education places emphasis on human values, upon human souls, upon living a life. The point of view is expressed by Dr. Kilpatrick in his statement that, "The school now coming into being is and must increasingly be a place where actual living goes on. Only from and in living can one learn how to live better . . . . Only as the school is placed on a basis of actual living can certain necessary social-moral habits and attitudes be built, certain necessary methods of attack upon problems and enterprises be developed." And later in this same treatise we read that the, "Curriculum and method must both be put upon a dynamic basis instead of the old static basis . . . . The school must become a place where life, real experiencing, goes on. Only on this basis can our children learn what they need."

The kind of school needed to meet the demands of the new education as set forth by Dr. Kilpatrick must have these characteristics:

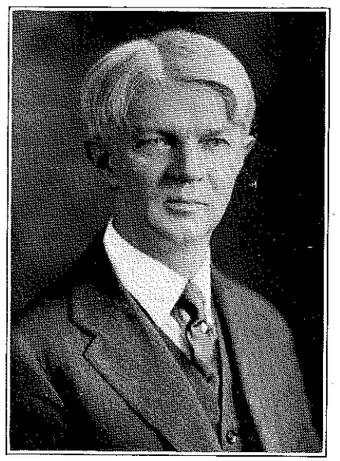
"1. It must be a school of life, of actual experiencing.

"2. It must be a place where pupils are active, where pupil enterprises form the typical unit of learning procedure.

"3. There must be teachers who sympathize with childhood, who know that growing can take place only through progressive pupil activity.

"4. There must be a curriculum consisting of such a succession of school experiences as will best bring and constitute the continuous

In the present rapidly changing civilization, the influence of parents and home environment is more and more dropping out of the life experiences of the children. Education must come to the rescue, and to this end Dr. Kilpatrick would give the schools back to the children. He states that, "The school now coming into being is and must increasingly be a place where actual living goes on. Only from and in living can one learn how to live better. Our young people must build such dynamic outlook insight, habits, and attitudes as will enable them to hold their course amid change." He believes that education should not prepare for a fixed future but should proceed through a flexible, dynamic curriculum "directed principally toward proper attitudes, points of view, and



W. H. Kilpatrick

methods of attack. . . . To do this, they must, as they grow older, increase in the ability to stand on their own feet—to decide matters wisely for themselves."

Special Application to Agriculture

Teachers of agriculture and others interested in agricultural education will recognize in the foregoing point of view much of the basic philosophy upon which the program for teaching agriculture is developed. One cannot help but think of the individual pupil farm practice activities that play such an important part in the work of the farm boys who study agriculture and of the indi-

better ways of behaving." It is with deep satisfaction that those interested in teaching agriculture can find in the sound educational contributions of Dr. Kilpatrick a sustaining philosophy for the guiding principles and procedures upon which agricultural education is developed in the public schools. His writings and public addresses are replete with statements that are finding expression in the daily activities of teachers and pupils as they work forward in farm practice, projects, field trips, class discussions, and individual study of the problems that are met in their daily life.

The Project Method

When the technique of the hide-bound traditional school where "subjects" were taught, where lessons were assigned, learned, and recited, was purged through scientific research in education, Dr. Kilpatrick was one of the first to "go modern" in interpreting, in practicing, and in disseminating the new educational philosophy. In the new education, the point of view of great interest to teachers of agriculture and the contribution that perhaps exerted the most vital influence on procedures of teaching was the evolution, presentation, and analysis of the project method. The teachers of agriculture were among the first, if not the first, to use the project as a vitalizing factor in learning. It remained, however, for Dr. Kilpatrick to give scientific prestige to the procedure by developing a sound project philosophy of teaching which became generally known as the project method. In its broader meaning, the project method is a method of learning rather than a method of teaching. The project method therefore centers the interest in the learner rather than in the teacher. The writer believes that few contributions in education have had a more wholesome and far-reaching effect on methods of teaching. Dr. Kil-

Dr. Field's article, beginning on this page, is the seventh in our series, "Contributions of Leading American Educators". Dr. Field writes, "I experienced a real thrill in reading critically those of Dr. Kilpatrick's contributions available here. His philosophy fits our program for teaching agriculture so completely that I could not help but regret that it has not been my good fortune to be a student in his classes. And what a wonderful teacher of agriculture he would have made."

I hope that this article may stimulate many of our readers to delve more deeply into the basic philosophy of Dr. Kilpatrick, with special reference to the improvement in the organization and teaching of vocational agriculture.

patrick's conception of the project method as a "*wholehearted purposeful activity proceeding in a social environment*" has become a guiding beacon to thoughtful and conscientious teachers, from those in charge of the simplest learning activities of pre-school children to those directing the most exacting and exhaustive study of the candidate for the Ph.D.

The underlying theory of the project method, the use of the purposeful act in the educative process, is unmistakably at variance with the traditional procedures in teaching, says Dr. Kilpatrick, as he develops the following interrelating ideas in the project method.

"First, in order that a school may properly discharge its function *the pupils must purpose what they do.*

"The second constituent idea is that *actual learning is never single.*

"The third constituent idea in the position here presented is, that *all learning encouraged by the school is so encouraged because it is needed here and now in order to carry on better the enterprise now under way.*

"The fourth and final constituent idea is that *the curriculum is a series of guided experiences so related that what is learned in one serves to elevate and enrich the subsequent stream of experience.*"

There is perhaps no word more frequently used in the jargon of the classroom teacher than *purposing.* It has become almost a reverent expression in learning and in building appropriate teaching attitudes. Dr. Kilpatrick points out that one of the great weaknesses of the old teaching was in the fact that it was done mostly outside its natural setting, and so had few contact points. "The presence of purpose is a powerful factor in organization. The end in view, being consciously held, helps to direct each step in the process so that one is joined to another with a conscious reason . . . . This makes a better unified whole than we could have when things have been less consciously done."

In a purposeful enterprise, he indicates four steps: purposing, planning, executing, judging. These are helpful guides to improvement in farm practice activities.

He contends that "our plan is primarily that a child shall wish what he does" wholeheartedly. The school child must have freedom enough to practice choosing—as much freedom as he can wisely use. "To practice choosing, is the best promise for growth in power to choose." Yet, in the teacher, Dr. Kilpatrick contends, is lodged the actual final authority to command or forbid, with growth as the criterion for the child's capacity for wise use of freedom. The child should have freedom to practice planning, practice executing, and practice judging. The teacher has authority, but should help the child to help himself. In conducting home project work, then, Dr. Kilpatrick believes that a boy must not be given a detailed plan telling him how to conduct such project work. He gives emphasis to the point that the boy's wholeheartedness of purpose is stifled by following another's plan for his farm practice activities. His degree of responsibility for carrying out the project is negatively affected. "The more fully the child can and will take each step for himself, the better."

Textbooks and Courses of Study

Teachers of agriculture who have largely forsaken the textbook method of teaching and who have substituted the local course of study, based on the life needs and problems of the students in place of the less usable state course of study, will find a substantial degree of satisfaction in the point of view expressed by Dr. Kilpatrick regarding the kind and source of teaching materials. "Many textbooks of the present day aim only at presenting children with pre-digested thinking. Such I should not use, or at any rate, I should not use them as was intended by their authors." He suggests replacing them with, first, ". . . . a reading book, one that would tell in a fascinating way the story of history or geography or travel or adventure, or of insect life. Another would be a compendium of ready reference . . . . to be consulted as need might arise. Still another would be a book that raised questions, stimulated inquiries and activities, and still another one would contain self-directing and self-testing drill material . . . . Most remain to be written, perhaps."

In place of the course of study as hitherto understood, Dr. Kilpatrick suggests a tentative program "a kind of compromise measure."

"1. A clear account of the theory, with emphasis on the new kind of aims.

"2. A few specimen projects of various sorts worked out in detail to show the kind of thing to be expected and why, with a study of the correlative outcomes.

"3. A list of suggestive projects much larger than could possibly be used, with appropriate reference materials and suggestions for equipment.

"4. Some account of outcomes reasonably to be expected, with emphasis on habits, attitudes, and appreciations, since these have too generally been overlooked—such outcomes not to be held up as immediate objectives but to help the teachers and pupils estimate their own progress.

"5. Some self-teaching and self-testing drill material with statement of correlative desirable standards."

Teachers of agriculture experience considerable difficulty in properly organizing local course-of-study materials. The influence of Dr. Kilpatrick has been instrumental in focusing the attention of teachers upon the psychological order of organizing subject matter rather than the logical. "The psychological order is the order of experience, of discovery, and consequently, of learning. The logical order is the order of arranging for subsequent use what has already been learned." This point of view has helped many teachers out of perplexing teaching situations and has given new life to the learning activities of children. The concept is especially valuable in developing interesting, purposeful, and worthwhile farm practice programs among farm boys.

Teachers of agriculture hear a great deal about the value of recognizing student initiative in selecting and planning the study activities of the boys. The wisdom of this is acclaimed by Dr. Kilpatrick in his condemnation of coercion in learning. "The presence of an aroused contrary mind-set is the essential factor mind-set . . . . is to bring unreadiness for the coerced action and to lesson . . . . the satisfaction accompanying the successful completion of this action. This unreadiness and accompanying lessened satisfaction would mean, by the psychological Law of Effect, less of learning in connection with the coerced activity . . . ."

"But coercion does not prevent all learning. Our point has been that insofar as coercion arouses and maintains a contrary mind-set, it tends to reduce and lessen the learning we wish . . . . so far as the child feels the coercion to be coercion, the desired learning is lessened. I admit the need for getting the child to put forth the necessary initial effort, but I cannot admit that coercion is always the best way to secure this needed effort . . . . as a teaching device, coercion is always in some measure an evil. In a particular case, it may be the best available instrument."

Learning is Never Single

In presenting the concept that learning is never single, Dr. Kilpatrick has given emphasis to a point of vital importance to teachers of agriculture. He has made popular the use of the terms *primary, associate,* and *concomitant* learning. "Primary learning refers to all learning that belongs closely to the enterprise immediately under consideration—knowledges and skills. Associate learning refers to those allied thoughts or ideas that come from working on the main enterprise. Concomitant learning refers to such learning as is not closely or exclusively associated with the problem, but which has to do with more generalized ideals and attitudes. Prominent among concomitants, are personal attitudes, attitudes towards one's teachers, or comrades . . . . The building of attitudes forms a large part of Dr. Kilpatrick's philosophy of teaching. It is wrong to ignore the building of attitudes, and we must change our management of children. Our schools must be changed."

Attitudes cannot readily be assigned as a task to be learned because they are subjective and should be developed thru individual experiencing. For example, co-operation is an attitude that can best be developed thru a series of co-operative activities rather than reading about co-operation in a textbook.

The opportunities for using the associative and concomitant learning concept are unusually numerous in teaching agriculture. The teacher must at all times be conscious of the fact that "each study period, each recitation period, each recess (each farm practice activity) is in its own measure going to result in primary learning of some kind, well or ill done; in few or many, rich or poor, associated suggestions; in good or bad concomitants."

Education and the Social Crisis

Altho the writings of Dr. Kilpatrick are largely in the field of learning and teaching, he has expressed himself on certain problems that are of significance during the present crisis in our changing civilization. Space will not permit extended discussion, but a few brief quotations will be presented, in order that an idea may be gained of the point of great turning points. Modern technology brings far-reaching changes and demands yet more. It has given us the means of creating unheard-of wealth, but it takes away the historic American dream of equal opportunity for individual freedom and intiative. The old frontier individualism is gone, and with it must go our old competitive business."

". . . . We must become socially minded and socially disposed. Our teachers have thot not in terms of social responsibility but rather of subject-matter and mere school keeping.

". . . . Education, however, can hardly be true to itself or its obligations in any full sense unless it becomes in fact a profession organized and ready to assume its social responsibilities . . . . So understood, every intelligent farmer, every thoughtful mechanic, while he pursues his specific efficiency, is at the same time educating himself in the school of experience. But the farmer or the mechanic rightly thinks of himself not as an educator but as a farmer or mechanic. His education may be inherent in what he does, and it is true education, but to him it is incidental. Education as a process in and of itself, and how to manage it as such is not his vocational aim.

"Along four general lines we shall expect to teach our pupils: (1) to expect social changes, that 'becoming' is in fact the law of the life process, that wherever we look we see always something coming into being; (2) to wish the common good and seek it in season and out; (3) to learn to criticize in the light of the common good any existing and proposed institutions; (4) to seek to envisage a defensible social program, each thinking for himself and in behalf of the whole. Along these lines we shall seek to have the pupils enrich their lives on the best attainable basis."

A Master Teacher

Since Dr. Kilpatrick is by profession a teacher, it is but natural to expect that he puts into practice what he preaches. A philosophy so rich in sound, usable suggestions must have had its origin in actual classroom experiencing. His contributions to the philosophy of education are but verbal expressions of a life or mode of living as a teacher. He has learned to say thru doing what many others can say only with words. One of his former students writes of him that, "His influence has been beneficial in education particularly because he has emphasized the learner rather than the teacher. He has helped to bring about a kindlier and more sympathetic attitude toward children."

Dr. W. H. Kilpatrick is a master craftsman, a teacher par excellence, whose sound philosophy and efficient practice have contributed much to the improvement of teaching and to the joy and efficiency of the learner. No one can hear his lectures, or read his philosophy, or sit at his feet as a student without experiencing a genuine feeling of "Go thou and do likewise."

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"New Point of View in Education,"

Occupations of The Vocationally Trained

"VOCATIONAL education can scarcely be justified in the high schools because its pupils have no idea of the vocation which they expect to enter. Therefore, vocational training is largely wasted and only theoretically useful." This is a philosophy commonly expressed by the un-informed citizen.

Mr. H. I. Smothers has answered this statement with an interesting study. The study was that of the occupational careers of all the graduates of vocational and non-vocational courses of the Newton, Iowa, High School, 1920-29. The different curriculums found in the High School were trades and industries, agriculture, commercial training, academic or college preparatory, and normal training.

His study included 1,003 past students and graduates of the Newton High School, distributed thru these five programs. Not all of the academic college preparatory graduates were included, as the number was so large.

His conclusions, which seem to be well founded by the data he secured, are as follows, altho in briefer form:

"1. This study indicates that the courses taken in high school were closely related to the occupation followed during the first years out of high school.

"2. The vocationally trained students have shown greater persistence in college, which may indicate that they have a more definite objective than do the non-vocationally trained who go to college.

"3. The vocationally trained students show greater stability in their occupational careers. There has been less fluctuation in the nature of their employment.

"4. While there are many students who take vocational training and do not enter an occupation identical to the training received, there are almost as many who neglect to take vocational training but do enter occupations for which specific training was offered during their high school career.

"5. While the tendency of the girls to marry and become homemakers is similar in all three groups, the vocational graduates are a little slower to marry; this is especially true of the commercial students.

"6. . . . . The average increase of the second or last period over the first five classes was as follows: Vocational agriculture, 146 per cent; trades and industries, 26 per cent; commercial training 33 per cent . . . . "

Source of Students for the Five Careers

Of those Newton High School students who entered industrial careers, 55 per cent were recruited from the trades and industries curriculum; 32 per cent from the college preparatory; and 12 per cent from the vocational agriculture. At the conclusion of the study, the figures were almost identical, indicating that employment was rather permanent.

Of those who entered agriculture, 62 per cent came from the vocational agriculture courses, and 34 per cent from the college preparatory. At the end of 10 years, the figures again were almost identical, showing the tendency toward "staying put" in agriculture. It looks as if some language students might have well studied agriculture.

Of the boys entering commercial careers, 64 per cent originated from the college preparatory curriculum; 16 per cent from the commercial, 11 per cent from the vocational agriculture, and 8 per cent from trades and industries. It would appear that not nearly as many of the boys were benefitted by commercial training as was true with the other two programs just mentioned.

Of the boys entering college, 87 per cent were from the college preparatory program; and of the girls, 61 per cent, altho 19 per cent entered college from the commercial and normal-training programs. Approximately 8 per cent of the agricultural students went to college.

Here is the case study of a single high school, operated thru a period of years with a rather broad vocational program. The programs apparently have been well justified. The real criticism might be that the high school faculty is not exercising sufficiently wise guidance to direct more of its students into the vocational programs for which they are personally qualified and into which occupations they will eventually find their way.—E. C. M.

A Significant Program in Public School Education in Agriculture

ONE of the most significant undertakings in public school education in agriculture outside the federally-aided program which the Middle West affords is that of the Ottumwa, Iowa, high school under the direction of Mr. Paul A. Troeger.

After graduating in Agricultural Education at Iowa State College in 1921, Mr. Troeger had charge of the work in General Agriculture at Ottumwa for two years. Later he worked as a teacher of vocational agriculture and as a superintendent of schools, but his former posi-

Occupational Distribution of High School Graduates According to Curriculum Followed in High School

O. L. YOUNG, Instructor in Vocational Agriculture, Germantown, Ohio

WHY should a boy study vocational agriculture when so few ever become farmers or are employed anywhere in the field of agriculture? This is one of the criticisms of vocational agriculture. The writer undertook a study to find out to what extent students in vocational agriculture found employment in the field of their training as compared with high school students who follow other curriculums.

All data were secured by personal visitation to the superintendents of the schools used in the study. Data were secured on 998 graduates of nine high schools. Of the 998 graduates, 36 per cent were enrolled in the "general culture" curriculum; 26 per cent in the "college entrance" curriculum; 26 per cent in the commercial; and 12 per cent in the vocational agriculture curriculum. The graduates of 1928-31 inclusive were used. All nine schools whose graduates were considered had the four curriculums in operation.

Table I shows that three-fourths of the graduates in vocational agriculture are following their high school training, whereas only six-tenths of the "college entrance" group and one-fourth of the commercial group are following the field for which they trained. Should these schools be typical, the chances are three out of four that the graduate in agriculture has selected his training wisely. When graduating in commercial training, the chances are one in four of having selected wisely.

The agricultural program made the highest record in seven of the nine schools. The commercial training program ranked the lowest in seven of the nine schools.

The argument might be made that since there are fewer graduates in agriculture, they are a more select group and so should show a higher percentage of continuance in the field for which they trained. There were less than one-half as many graduates in vocational agriculture as in either of the other two programs. It should be borne in mind that only boys take vocational agriculture, and that less than one-half of the graduates in this study are boys. Furthermore, usually only farm-reared boys take vocational agriculture, and less than one-half of the male graduates in this study were farm reared.

The reader might question the effect that girls have in the commercial and "college entrance" programs, since there are no girls enrolled in agriculture. Table II throws some light on this point.

Table II shows that girls follow their field of training in high school when preparing for college and when following commercial training to a greater degree than do boys. This being true, the more accurate picture might be that given in Table II where only the boy graduates are considered. For boys then, the chances for a graduate in agriculture having chosen his training wisely [illegible]

TABLE I.—RELATION OF THE CURRICULUM TO THE OCCUPATION FOLLOWED BY HIGH SCHOOL GRADUATES

Curriculum Followed in High School	Number of Graduates	Number of Graduates Found in the Field for Which Prepared	Per Cent of Graduates in the Field for Which Prepared
College entrance	262	156	59.5
Commercial	266	61	22.9
Agriculture	115	88	76.5

TABLE II.—RELATION OF THE CURRICULUM TO OCCUPATION FOLLOWED BY BOYS AND GIRLS

Type of Curriculum in High School	Number of Graduates	Number Graduates Found in the Field for Which Prepared	Per Cent Graduates in the Field for Which Prepared
BOYS—			
College entrance	83	41	49.4
Commercial	68	5	7.4
Agriculture	115	88	76.5
GIRLS—			
College entrance	179	115	64.2
Commercial	198	56	28.3

TABLE III.—RELATION OF THE CURRICULUM TO THE COCUPATION DURING THE ECONOMIC DEPRESSION

Type of Curriculum in High School	Number of Graduates	Number Graduates Found in the Field for Which Prepared	Per Cent Graduates in the Field for Which Prepared
1928 and 1929 graduates—			
College entrance	114	71	62.3
Commercial	115	26	22.6
Agriculture	45	32	71.1
1930 and 1931 graduates—			
College entrance	148	85	57.4
Commercial	151	35	23.2
Agriculture	70	56	80.0

TABLE IV.—OCCUPATIONS SELECTED BY FARM-REARED BOYS WHO WERE GRADUATES, GROUPED ACCORDING TO THEIR TRAINING PROGRAM

Occupation in Which Employed	Total Number Farm-Reared Boys	College Entrance Graduates Number Employed	Commercial Graduates Number Employed	Agricultural Graduates Number Employed
Farming (general)	98	11	15	72
Factory	17	1	7	9
College other than agri.	9	3	3	3
Agricultural college	4	0	0	4
Clerk (store)	4	2	1	1
Truck driver	4	0	1	3
Chick hatchery	2	0	0	2
Farm laborer	2	0	0	2
Trapper	2	0	0	2
Barber	2	1	0	1
Dairyman	1	0	0	1
Engineer	1	0	0	1
Farm manager	1	0	0	1
Filling station	1	0	0	1
Fruit farmer	1	0	0	1
Grain elevator	1	0	0	1
Unemployed	1	1	0	0
Marines and Navy	2	0	1	1
Milk tester	1	0	0	1
Odd jobs	1	0	0	1
Poultry farmer	1	0	0	1
Tool maker	1	0	0	1
Truck farmer	1	0	0	1

Responsibility for Training for Agricultural Leadership

BARTON MORGAN, Iowa State College

Barton Morgan

WHEREVER people are gathered together, we find leaders in evidence, and their service needed. A few hundred people meet for a picnic. No one is in definite authority, yet someone will come out of the group and assume control. An accident happens. A crowd soon gathers, and someone from that crowd will take charge of the situation. A group of children congregate on a playground. They may be disorganized for a moment, but before long they will have accepted their leaders and will be playing together.

Leaders are needed in almost every phase of life. Social life must have leaders. The lodge must have leaders. The church must have leaders. Our government must have leaders. Industry must have leaders, and agriculture must have leaders.

The idea of having leaders is not new. Man has always found leaders necessary. The big question for us is not whether we shall have leaders, but rather what kind of leaders we shall have and how we shall be able to secure them.

Back in the old days, kings and nobles gave orders, and the rest of the people danced to their demands. Then, the determination of who should lead and who should follow was a simple matter—rank at birth decided that. The time came, however, when our forefathers who were champions of freedom smashed the twin traditions of the divinity of kings and the docility of subjects, and after that, the whole problem of who should lead and who should follow had to be worked out on an entirely new basis.

The democratic concept is that the ablest and noblest shall lead, and the others shall follow; that all shall work together for the good of the group and for the exploitation of none. We have failed to attain this ideal, and the situation is becoming more crucial every generation. Our best thinkers now tell us that if our democratic organizations and institutions are to survive, we will have to discover and develop honest and able leaders willing to put service before self, and we will also have to train intelligent followers able to distinguish between real leaders and mediocre men who now find their way to places of influence and power.

Whatever may be said of the importance of followership, there is a growing feeling that the progress of our civilization is halted for lack of leadership. This dirth of vision and leadership is to be found in civic problems, in farm problems, in religious problems, in industrial problems, and in labor problems. It is found in problems of money and banking, in problems of amusements and recreation, and in problems of education. Reflection convinces us that Glenn Frank, President of the University of Wisconsin, was right when he said, "The famine from which we are suffering is famine of leadership thruout the western world."

The shortage of honest and capable leaders in our national life is indeed great, but nowhere is this shortage so great as in rural life and agriculture. "Neither in the new world," says George Russell, "nor in the old has there been much first-class thinking on the life of the countryman. This will be apparent if we consider the quality of thot which has been devoted to the problems of the City State or the constitution of widespread dominions, from the days of Solon and Aristotle down to the time of Alexander Hamilton, and compare it with the quality of thot which has been brought to bear on the problems of the rural community."

This lack of foresight and leadership has cost the farmer dearly. Many of our tariff laws discriminate against him; our tax system bears down heavily upon him; and money and banking facilities are not serving him as they should. He lacks health facilities; he suffers a social handicap; his children are subjected to inferior educational opportunities; the marketing set-up is against him; the economic return for his arduous labor is low; and the land which he works is passing out of his hands.

The farmer's plight is well expressed in the following statements from "An Address to the American Clergy, Catholic and Protestant," written by a group of ministers who had made extended studies of the agricultural situation. They said:

"Farmers are in debt because they have tried to build schools, good roads, good homes, and efficient farm plants. The institutions of credit furnished them have encouraged this debt, and now in their time of need have almost entirely deserted them. With a normal interest rate, now made more than ever burdensome by a decreased income, the break down of credit has made farmers victims of intolerable conditions. Instances have been found of farmers paying 42% interest on loans. For lack of a small amount of additional credit, the equities which represent lifetimes' savings have been ruthlessly swept away. Foreclosures are continually and even more rapidly increasing.

"This combination of debts, decreased income, and foreclosures is bringing tragedy to hundreds of thousands of American farmers. It is filling with discouragement men who are doing basic work with a moral purpose none can impugn. It is punishing men who took a chance to build America in intelligence and economic efficiency. They are reducing their standards of living at many points to a peasant level. Habits of labor and thrift are being rewarded with failure for which they are in no sense re-

eration who by their labors created improved rural schools, better churches, and hard roads, are being dispossessed of their homes, driven from the land to face an old age of poverty."[1]

In 1927 Macy Campbell wrote a great book *Rural Life at the Cross Roads*. It seems now that we have gone by that crossing of the ways, that we have taken the road that leads downward. Some say that we are headed for peasantry. I wonder if it is peasantry or something worse. The peasant owns the land he works. The American farmer is losing his land. "If the present trend continues," says Dr. C. C. Taylor, "we will develop a hired-man, cropper, rural slum . . . . There isn't a civilization on the face of the earth that is a thousand years old whose rural people are not largely tenants or peasants."[2]

The issue is clearly drawn. All Americans, whether rural or urban, will be benefitted by making rural life more profitable and satisfying. The call comes clear and strong for the best heads and the stoutest hearts to lift high the banner of rural life and to lead the people back to their rightful place in American life.

There is one source of help for agriculture which promises much if encouraged and properly directed. Education is that source. No nation that has put its trust in the right kind of education has ever been disappointed. Let us consider two outstanding examples.

When Napoleon was ruler of France, he goaded the Prussians into a war and completely crushed them at the battle of Jena in 1806. Prussia lost about half of her territory and half of her population, and was almost stricken from the list of important powers of Europe. Prussia had never experienced such humiliation as this. In a few months the constructive work of a century had been undone. Education was turned to as the regenerative agency. The king said:

"Tho we have lost many square miles of land, tho the country has been robbed of its external power and splendor, yet we shall and will gain in intrinsic power and splendor, and therefore it is my earnest wish that the greatest attention be paid to public instruction . . . . The State must regain in mental force what it has lost in physical force."

The result of this turning to education as the way out, helped develop the great German Empire of the Nineteenth Century.

Again we see the power of education in the case of Denmark. Sixty years ago the Danish farmer was a peasant, living

(Continued on page 192)

[1] *An Address to the American Clergy, Catholic and Protestant. Mimeographed circular published by Extension Service, Iowa State College.* 1932.

[2] *Dr. Carl C. Taylor in address at Iowa State College October* 20, 1932. *Mimeographed by the Extension Service, Iowa*

Supervised Practice

Visiting Other Teachers and Projects

WHEN visiting a nearby agriculture teacher one day, I quite accidentally spent most of the day with him visiting a few of his projects. I did not realize the value of such an experience at the time, but, as time went on, I felt I had gained much. The first visit we made was with a boy who had a sow and four matured gilts for his project. I noticed with keen interest the attitude the boy was taking toward his work. It was not hard to realize why. His father was much in sympathy with the boy's undertaking, and the product of the project was worthy of showing at any fair. These conditions could not but help contribute to the success of the project. The contact made between father and teacher was noticeably friendly, another attribute toward success. I noticed, too, that the teacher very diplomatically discussed with the parent and boy various points about the progress of the project in such a way as to leave with me the impression that both boy and father had increased knowledge of swine production. Quite another style of visit was made with another boy and his potato project. Here was a different situation. The project showed failure. Why? The father did not have a sympathetic interest in his boy and the project. I learned later that the boy wanted to treat his potatoes for scab, but the father told him it was all "humbug." Is it any wonder that the boy's project was failing? How could it be otherwise with such cooperation? It is not always the teacher's fault. I could not help but take inventory of myself and my project work during our visits. I believe that every teacher would profit by such an exchange of experiences. No doubt we can learn much by studying other teachers and their methods.—Harold Hungerford, Fan Mill, Illinois.

A Significant Program in Public School Education in Agriculture

(Continued from page 181)

tion at Ottumwa lured him back several years ago.

Mr. Troeger's work engages him full-time thruout the 12 months. He reaches large numbers of pupils thru his classes. He has an extensive community program with town and country people.

His most conspicuous project has dealt with gardening. Last year it was stated that he had saved the community $10,000 as a result of his garden club work and his garden for the unemployed. This year he is starting out with an appropriation of $850 for this project. He has supplied 600 families with seed and is apportioning ground to 200 families. He is conducting 14 junior garden clubs with leaders for all but three, which he personally directs. An extensive fall exhibit of garden produce is a part of the

Improving Swine Production Practices On Home Farms Through Ton-Litter Achievements

F. J. RUBLE, In Charge of Teacher Training Center at Grove City, Ohio

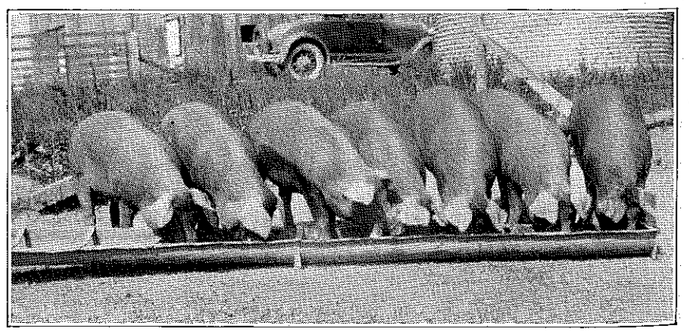
ONE aim of the Grove City F. F. A. is swine improvement. Some twenty boys, in addition to part-time and evening students, are enrolled in a community program to improve breeding stock, and to market hogs at an earlier age in time to secure the better prices. How well these boys are succeeding is reflected in the accomplishments of two F. F. A. members,—Edgar Gochenouer, and Emmit Yoakum. While both made the Ton-Litter Club in 1932, their weight records are not unusual, but what we might hope for on the average farm under a good system of management. Ed's litter of 10 purebred Durocs weighed 2,005 pounds at 180 days in breeding flesh, while Emmit's litter of 9 purebred Polands weighed 2,077 pounds in 168 days in market condition. Ed's feed cost from breeding to marketing was $60, as compared to a sale and inventory valuc of $120; while Emmit's feed cost was $55, with a sale and inventory value of $108.

On Ed's farm in his freshman year we found five sows of mixed breeding, the offspring of which were commonly marketed at 8 to 10 months of age at a time of low prices. Altho Ed had a sow and litter project his first year, the main result was a dissatisfacion in the way things were being done. An outgrowth of this project was the purchase of a good purebred Duroc Jersey gilt which dad considered too leggy and too long. This gilt farrowed 13 pigs in extremely cold weather, raising 10 of which 7 were gilts. They weighed 5 pounds over the ton mark at 180 days. Dad and mother have decided that purebred Durocs are pretty good hogs, and in partnership with Ed, are keeping the four best gilts to replace the original sows, all of which have been idsposed of.

Emmit's story is the kind that we like to hold up before the class as an example, something to strive for but which can be attained only thru persistent effort. During the summer of 1931, before enrolling in the agriculture class, he selected hogs for a project. Not content with what they had at home, he watched a neighbor's pigs grow and develop, and early selected his gilt, after she was bred. On March 7, nine large and healthy pigs were farrowed, the result of proper care and feeding. Despite a nearly zero temperature all were saved by taking them to the basement and returning them to the sow only long enough to nurse, for the first 48 hours.

As the ground near the building was badly infested with round worms, it was necessary to take the sow and litter more than a quarter mile from the house to clean ground. While this meant several trips daily, they were made gladly by Emmit. Dad took care of his in the usual way in the most convenient place—infested soil near the buildings. Often he did not see the project pigs for weeks. Soon after school was out, the vocational instructor called to weigh the pigs (a regular monthly practice in this department during the summer the last three years,) and found they had an average weight of 68 pounds at 11 weeks. The father was very much surprised at the weight, and declared that he might be able to learn something from his son about feeding pigs. The pigs had an average weight of 231 pounds at 168 days, about twice the weight of the father's pigs. Emmit is keeping his best gilt so as to enlarge his swine enterprise next year.

These projects have been interesting to the instructor because both boys were able to accomplish their goal—to make hogs return a good profit under adverse conditions and to make a decided improvement in their home program. Success of this nature pays good dividends to all parties. The interest and enthusiasm are indeed contagious.



Supervised Farm Practice and The Smith-Hughes Act

W. T. SPANTON, Western Regional Agent in Agriculture, Federal Board for Vocational Education.

IT IS interesting to study the wording of certain sections of the Smith-Hughes Act and the published reports of the congressional hearings on that legislation which deal specifically with agricultural education, for the purpose of comparing the ideas and viewpoints on vocational education in agriculture held by the framers of this legislation with the trends in its development since 1917.

The Objectives of Vocational Agriculture

To one who has made such a study it is evident that the major purpose of Congress in making appropriations for the salaries of teachers of agricultural subjects available to the states was to stimulate a very specific and long-neglected type of education. Vocational education in agriculture has for its major objective the more adequate preparation of persons 14 years old and over "who have entered upon or who are preparing to enter upon the work of the farm or of the farm home." Section 10 of the Act, provides, "That in order to receive the benefits of such appropriations for the salaries of teachers, supervisors, or directors of agricultural subjects the state board of any state shall provide in its plan for agricultural education;—that the controlling purpose of such education shall be to fit for useful employment; that such education shall be of less than college grade and be designed to meet the needs of persons over 14 years of age who have entered upon or who are preparing to enter upon the work of the farm;—that such schools shall provide for directed or supervised practice in agriculture, either on a farm provided for by the school or other farm, for at least six months per year—."

The Importance of Supervised Farm Practice

The last clause of the section quoted is perhaps the most explicitly mandatory provision of the entire act as far as vocational agriculture is concerned. It prescribes the most essential procedure by which such farmer training shall be given, and clearly indicates that the national program of vocational education in agriculture was designed to be first of all practical.

Congress believed that persons could not be properly trained for "useful employment" and "the work of the farm" unless they were given the opportunity to secure participating experience in farming under proper supervision. This attitude regarding the necessity for participating experience in vocational agriculture is psychologically sound, and can not be questioned by any one who recognizes that the one big objective of a program of vocational education in agriculture is to develop ability thru systematic training and participating experience, for greater proficiency in

The Present Status of Supervised Farm Practice Activities

In spite of the importance attached to supervised farm practice by the Smith-Hughes Act, it is a matter of common knowledge that this phase of vocational education in agriculture has never attained as high a standard of proficiency as is desirable or as the framers of the act anticipated.

This situation is not new, but its full significance has not until recently been generally appreciated. This is due, perhaps, to the fact that in the past too much attention has been given to other problems. Probably more time and attention has been devoted by state supervisors and teacher trainers to the improvement of classroom teaching than to any other single phase of the work.

Early in the history of vocational education two rather distinct schools of thot developed with regard to supervised farm practice. One school believed that supervised farm practice should be the outgrowth of the classroom instruction, and that the home project was a device for putting into practice on the home farm the methods and practices decided upon in the classroom. Another school held to the idea that classroom instruction in vocational agriculture should be based upon the composite supervised farm practice activities of the pupils. From a practical standpoint the latter idea is more nearly in harmony with vocational objectives in agriculture as outlined in section 10 of the Smith-Hughes Act. Unfortunately, however, the former viewpoint prevailed during the early stages in the development of vocational agriculture. Recently the trend has been in the other direction.

As long as the former viewpoint prevailed, state supervisors, teacher trainers, and teachers gave first consideration to methods of classroom teaching. In far too many cases this led to neglect of supervised farm practice. With this change in viewpoint, there has developed a revival of interest in supervised farm practice, with the result that an increased amount of attention is being given to it. There has been no evident tendency to minimize or belittle the importance of good classroom methods and techniques. On the contrary, teacher trainers and state supervisors are realizing more than ever that if class and individual instruction is based on or made supplementary to the supervised farm practice activities of the pupils, the class instruction will be vitalized and made just that much more concrete and practical. Before much improvement can be brought about, the situation must be thoroly diagnosed in order that the specific difficulties may be discovered, and proper remedial measures devised.

Adapted from "Training Teachers in Su-

The Sour Crab Tree Ornithorynchus Paradoxus

IN AUSTRALIA there is still extant a most marvelous animal—a walking museum of almost everything which nature has ever invented or discarded during millions of years of evolution forward and backward. This prehistoric remnant, a mammal, has but one outlet for all the excretory channels of its body. It is a brownish creature with short fur and the bill of a duck, which in the young is studded with teeth. It has webbed feet with long claws, and the male has a horny, poisonous spur at each heel. (From Van Loon's Geography)

But this weird biological medley is no more queer than many programs of farm practice, as we carry them out. The list of projects which our students carry resembles in many respects the freak collection of fur, claws, and webbed feet of our little friend Ornithorynchus Paradoxus, whose function on earth no naturalist can tell.

The paradox lies in the way in which we apply vocational training principles. We agree that training for a vocation should be given on the job. We agree that the Smith-Hughes law was sound to prescribe supervised farm practice. But when we attempt to provide our students with such experiences as will train them to do a better job of farming, the program often matures as a collection of useless appendages, vestigial remnants, and a series of compromises between ideals and inertia.

There can be no progress without dissatisfaction. How well satisfied are you with supervised farm practice for the past season? Does your practice program have horns, feathers, teeth, and webbed feet? Spend a few minutes on the following questions.

1. Is the list of completed projects and supervised practices made up of the jobs your students need to know in order to do a better job of farming?
2. How many of your projects were big enough to call forth all the ingenuity and action which your students possess?
3. Do your students look upon a project as a privilege and an opportunity, or as a requirement?
4. How much of last year's classroom instruction has actually been applied in projects and supervised practice on home farms?
5. What did your students learn from their farm practice which they would not have picked up anyway, without your supervision or instruction?
6. Were the projects related to a long-time program which the student has planned carefully and definitely, with your guidance?
7. Are the records worth anything? To whom?
8. Were the plans carried out? Were they worth carrying out?
9. Did you really supervise the projects, or did they run themselves along the same old ruts of tradition?
10. What, if anything, can be done about it?—R. H. P., Montana Monthly Bulletin.

France, Germany, England, Belgium, and Italy, despite their crushing financial burdens and their comparative poverty, have maintained their schools at a

Methods

The Problem Procedure in Teaching Agriculture

Determining the Objectives to be Achieved

J. A. STARRAK, Iowa State College

IN A RECENT issue of this magazine (December, 1932) a very generous allotment of space was given to this writer, in which to discuss the problem method of teaching. But generous as was this space, it did not permit of anything more than a rather general and abstract treatment of the total procedure involved in teaching by problems. It was not possible to illustrate the various ideas and techniques presented with concrete examples drawn from the field of agriculture, and every good teacher knows that the generous use of concrete illustrations constitutes one of the most effective means of teaching general or abstract ideas or principles so that they will be understood by all.

Conscious of this weakness in the previous article and anxious that his readers might understand thoroly the essential principles of the problem method of teaching, the writer has decided to prepare a few short articles in each of which concrete application of one or more of the fundamental techniques in the problem procedure will be presented in some detail.

One essential and important step in the organization of subject matter for teaching purposes was referred to only very briefly in the preceding article, because of the fact that it is no more a part of the problem procedure than it is of any other good method. I have reference to the determination and formulation of the objectives to be realized by the subject or course under preparation.

It is impossible to exaggerate the necessity of teachers' possessing clear cut, definitely stated, and worthwhile objectives to be attained by their students as a result of any given course they are teaching. The lack of clear cut and valid objectives is probably more responsible for the ineffeciency of the instruction in our secondary schools, than is any other one factor. "Teachers possessing knowledge but knowing not what knowledge is for, skilled in the art of teaching but knowing not why they teach, seeing only immediate ends but seeing not the higher purposes have no right to be in any schoolroom." They present a picture of the blind leading the blind. They possess no standard by which to judge of the efficiency of the methods they are using, of the value of the subject matter they are teaching, or of the progress their students are making. All this is self-evident, yet teachers who can submit on short notice a set of objectives of unquestionable merit, stated in clear cut

This is the first in a series of four articles dealing with the problem procedure in teaching agriculture, written for the Agricultural Education Magazine by Dr. Starrak. In the July issue he will present "The Formulation and Arrangement of the Problem". In August will appear "Presenting the Problem to the Class for Study." In the September issue will be the last of the four articles, "Bringing the Problem to a Satisfactory Conclusion". This will bring to the teachers by the time school opens in the fall a very excellent discussion of the problem procedure. We feel fortunate in being able to bring these articles to our readers.

—EDITOR

University has said that "Nowhere in the world is education so pointless, so aimless as in America." This doubtless is not as true of teachers of vocational agriculture as it is of high school teachers in general, but even in our case there is great room for improvement in this respect.

Because of this I invite my readers to a consideration of this matter of educational objectives, for essential as the determination of proper objectives is to the success of all methods of teaching, it is absolutely vital in the problem procedure, since no text book or other formal and systematic organization of knowledge is to be followed. The problems employed must be based directly upon the objectives to be achieved. Therefore it is essential that these objectives be properly selected and clearly stated.

The determination of the objectives for any course is by no means an exact scientific objective procedure, since it involves the consideration of values largely subjective in character. Because of this, it is hopeless to expect unanimous agreement on the merit of any proposed list of objectives. This does not mean that objectives proposed by different persons are of equal merit. It does mean, however, that the selection of objectives must be influenced more by the experience, judgment, and general life philosophy of the persons selecting them than by scientific, objective, and impersonal considerations.

All this means that we must attack this problem rather carefully by first setting up some standards by which to guide our judgment. It seems that at least four questions are involved:

1. What should be the nature of the objectives, or in what terms should they be expressed?
2. How should the objectives be selected?
3. How should they be determined?
4. What standards shall we employ in evaluating the merit of proposed objectives?

There is not a little educational philosophy involved in this first question. In a good proportion of existing courses of study, objectives are stated in terms of knowledges to be learned. It is questionable however, if knowledge is a proper objective. It seems more nearly to be a means to an end, rather than a desired end. "Knowledge for its own sake" does not carry the weight among educators that it once did. We must go beyond the distribution of knowledge if our teaching is to be of greatest value to our students. "A merely well-informed man is the most useless bore on God's green earth" writes Alfred North Whitehead in his excellent essay "The Aims of Education." This does not mean that we are not going to teach our students knowledge, but rather that by using knowledge as a tool we are going to develop useful abilities, worthwhile appreciations, enriching interests, and high ideals of action. These are the true objectives, and having once formulated them in specific terms for any course, we must set them up as our guiding star, else we are likely to succumb to a very human weakness, i. e., the substitution of means for the ends. This topic merits a more thoro treatment than is possible here.

How detailed should the objectives be stated? This again is a question which does not admit a very definite objective answer. While the large generalized abilities, interests, and ideals are useful in giving direction to our teaching, they must be analyzed and broken down by successive steps into quite specific and detailed objectives, which are the immediate ends to be achieved by a specific problem or series of problems that form a teaching unit. For instance, in the objectives for the hog unit given below—i. e. "The ability to manage the hog enterprise to secure high-quality pork at the lowest possible cost," it is evident that this is a too general objective to be taught all at once. It is a complicated ability, composed of many subordinate abilities each of which must be taught in turn. One of the sub-abilities i. e., "the ability to select the female breeding and feeding stock" is also too involved to teach in toto, and it must be broken up into smaller abilities one of which is "the ability to select the female breeding stock of the swine herd." It may be held by some that even this is seems to the writer that the analysis has been carried far enough and that this last-named objective is small enough to be taught, yet large enough to be interesting and worthwhile.

How should the objectives of any given course be determined? We must find our objectives in the real life activities of the occupation for which we are training our students. Teachers of vocational agriculture have always been taught that it is one of their prime duties to get well acquainted with the farming practices of the community, by means of personal visits to their student's homes, by farm surveys, and by interviews with leading farmers of the community. They will find suggestions for the objectives to be achieved in the weakness existing in the prevailing farm practices and standards. In the formulation of the objectives to be achieved a teacher must consider several additional factors, among which are the following: (1) the age, intelligence, and previous education of the students, (2) the part of the school year, and the hours per day to be devoted to the subject, (3) the equipment and resources of the school and community, (4) the teacher's own proficiency in the subject.

With the foregoing information in hand, the next step consists in determining the large general objectives in terms of ideals, interests, and abilities. These large abilities are next analyzed in the various sub-abilities in the manner described in the preceding section.

What standards shall we use in evaluating the merit of any proposed objectives. The large subjective element in the procedure involved in the determination of objectives make a set of standards imperative. The formulation of these standards must in itself be a subjective process. I am suggesting the following:

1. Objectives should contribute towards the realization of one or more of the commonly accepted aims of the secondary schools, i. e., health, citizanship, vocational efficiency, home membership, ethical character, and the wise use of leisure.
2. Objectives should be stated in terms of life activities and not in terms of academic activities.
3. Objectives should be clearly and definitely stated or described.
4. Objectives should be attainable with the time, equipment, and general conditions available.
5. Objectives should belong to the course.

The validity of all these standards except the last, will be accepted, I believe, without much question. The last is included because schools are organized on the basis of subjects and courses, taught by different teachers. Because of this it is essential, in order to avoid duplication and waste, that the work to be covered in each course or subject be quite definitely outlined and that the different teachers adhere rather closely to the outlines of their respective courses.

To illustrate the practical application of these various ideas and standards, there is submitted below a specimen list of objectives for a hog unit in vocational agriculture. It is not held that the proposed list is perfect, and I do not expect agreement upon it. It is probable that many of my readers can develop a better list. But this list measures up quite well with the proposed standards and is at least suggestive of something better.

Objectives of the Hog Unit

1. Interests and Ideals:
   - a. An interest in hog raising.
   - b. An interest in the endeavor to improve hogs thru breeding and selection.
   - c. The ideal of "beating the average" in the production of quality pork at low cost.
   - d. Ideals of cooperation in the hog enterprise.
   - e. The ideal of becoming able to manage the hog enterprise so as to make it yield a maximum profit.
2. The ability to manage the hog enterprise to secure quality pork at the lowest cost.
   - a. The ability to select suitable breeding and feeding stock.
     1. The ability to select the female breeding stock of the swine herd.
     2. The ability to select the male breeding stock of the swine herd.
     3. The ability to select the feeder stock of the swine herd.
   - b. The ability to manage breeding stock so that a maximum number of healthy pigs will be farrowed per sow.
     1. The ability to feed the sow and boar during breeding and gestation.
     2. The ability to care for the breeding stock thru breeding and gestation.
     3. The ability to secure healthy pigs.
     4. The ability to feed the sow at farrowing time.
     5. The ability to save pigs at farrowing time.
   - c. The ability to properly house the hogs, at lowest cost.
   - d. The ability to raise a maximum number of pigs farrowed and to secure rapid gains during the growing period.
   - e. The ability to fatten hogs at a minimum cost.
3. The ability to dispose of pork at maximum profit.
   - a. The ability to market breeding stock.
   - b. The ability to market fat stock.
     1. The ability to plan production to meet quality demands of the market.
     2. The ability to adjust production and marketing to seasonal and annual trends in prices.
     3. The ability to determine the best method of marketing hogs.
   - c. The ability to butcher and cure pork.
4. The ability to organize and manage the hog enterprise under given conditions.
   - a. The ability to keep records necessary to the successful operation of the hog enterprise.
   - b. The ability to improve the organization and management of the hog enterprise thru the interpretation of records.

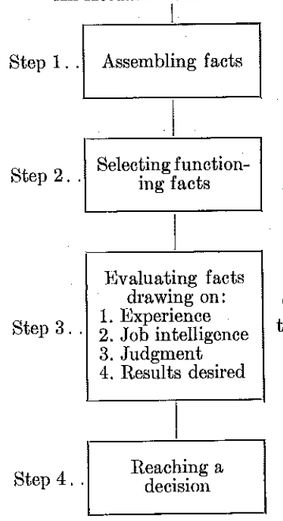
In the next article it is proposed to take one of the abilities listed above and develop a set of problematic situations by and thru which the proposed ability may be acquired by our students.

The Thinking Process

IT HAS been found by careful study that many people have never acquired a method by which to analyze or solve problems in their everyday work. How can our schools do something to promote the ability to do straight and constructive thinking? The fundamental work of teachers, both academic and vocational, is to stimulate thinking, whether it be abstract or concrete. It must be remembered that nothing is ever done unless it is accompanied by some form of mental activity; so, it is not hard to understand that good results depend on the proper control and direction of this mental activity.

In order to be of help to the teacher, Doctors Prosser and Allen, eminent vocational educators, and pioneers in their field, have popularized the use of an ingenious device. It consists of a rather simple analysis of the process of thinking. This may be applied to the solution of any problem arising either in the classroom or in after life.

Steps in Thinking



Three steps are used in making a decision. If an error occurs in the first three steps, the decision will be incorrect. Step 3 represents the most difficult part of the thinking job. It is based on (1) past experience, (2) job intelligence, (3) judgment, (4) ability to think in terms of the results desired. This step is often referred to as the "think box" because this step is actually worked out by the brain of the individual involved in the problem. The discussion is given to promote individual improvement.—Robert F. Gervais, *McGill Schools.*—Nevada Reflector.

Filing Reference Material

AS THE summer months are usually the ones in which the cataloging of bulletins is done, I am outlining herewith a simple method which I have found to be satisfactory.

(Continued on page 189)

Educational Objectives and Vocational Agriculture

N. E. FITZGERALD, Professor Agricultural Education, University of Tennessee

N. E. Fitzgerald

THE Commission on the Reorganization of Secondary Education in its report, entitled *Cardinal Principles of Secondary Education* (Bulletin No. 35, 1918, United States Bureau of Education), has set forth seven main objectives of education upon which work in the secondary schools should be focused. The objectives are derived from the point of view of the commission expressed in the following: "It is the firm belief of this commission that secondary education in the United States must aim at nothing less than complete and worthy living for all youths, and that therefore, the objectives described herein must find place in the education of every boy and girl." The seven objectives set up by this commission are as follows:

1. Health
2. Command of fundamental processes
3. Worthy home membership
4. Vocations
5. Civic education
6. Worthy use of leisure
7. Ethical character

Vocational agriculture as a subject of study in the public high schools will upon examination be found to be of importance in each of these seven objectives. For sometime it was the practice among educators to fit subjects of study into the curriculum to take care of one of these objectives. In the past few years it has come to be felt by leading students of education that a close correlation should be made in these subjects of study, and as an outcome, we now have the principle of integration, which principle properly interpreted means the contribution by each subject of study to as many of the seven main objectives as possible. In other words, we have gotten away from the point of view that teachers of English should be concerned only with those problems ordinarily found in English as a subject of study. The teacher of English becomes one who is in part responsible for the health of the people, for the development of the citizenship, home membership education, etc. By contributing to as many of these objectives as possible, teachers are at once changing their aim from the teaching of subject matter to the development of individuals to the point where they may take their proper places in society. Agriculture may contribute as follows:

1. *Health.* This objective in schools is certainly one of the most important. Vocational agriculture offers many opportunities to contribute to the health objective. There is the opportunity to emphasize continued health thru the proper use of vegetables and fruit in the diet, and the production of these in order that the average successful farmer has at 45.

Many problems in the health of farm animals have their application to the health of human beings.

2. *Command of fundamental processes.* The opportunity is available in agriculture classes to help students to have a more complete command of the fundamental processes, which include the proper use of language, interpretation of the printed page, and greater skill in the use of figures. Agriculture requires, when taught on the problem basis, skillful use of these various processes, and the teaching of agriculture can do much to help the teachers of English and arithmetic in developing in the student a more thoro knowledge of the subject matter in these courses. This procedure by the teacher of agriculture provides the practice for the student as he proceeds thru his high school course.

3. *Worthy home membership.* Agriculture touches home life at almost every angle. For a certain portion of the population it is a mode of living as well as a business. The supply of food products is important, not only for the rural people, but it is essential for city dwellers whose contacts have been with manufacturing and commerce rather than with the supply of raw materials. Vocational agriculture is based upon the fundamental sciences, such as physics, chemistry, and biology. Many of our schools now teach general science in addition to some of the other sciences, and the principles taught serve well to emphasize the value of agriculture. The farm shop work teaches the high school boys to make those things that contribute to the efficiency of the home. The boys are learning not only to make wagon beds and feed troughs, but they are learning to make ironing boards, put in kitchen sinks, wire houses for electricity, and other numerous jobs that contribute to a happy home life. This sort of activity gives the boys a new attitude toward their relationship with home life.

4. *Vocations*: Altho it is not possible in most instances to find boys in agriculture classes who have full control of farms, and therefore, who realize fully the problems of the farm, nevertheless it has been possible to build up programs of farm practice work of increasing scope so that at the end of four years in the high school the boy has had contacts with and experiences in the production and sale of many farm products. At present, the teachers of agriculture are emphasizing the economic side of agriculture, looking toward a more economic production and efficient marketing. It is not claimed that boys having had four years of vocational agriculture will be graduated as full-fledged farmers, but it is claimed that boys with such school training can go into the farming business with a much clearer insight into the opportunity in this business than have many of the persons who are now farming. It has been well said that the teaching of vocational agriculture will give the knowledges, skills, and experience to

5. *Citizenship*: Farming is one of the businesses of enlightened society, and its importance should be known by all of the citizens. A farm boy should know the place that agriculture plays in the industry and commerce of the world, in order that he may know better the part he is playing in this complex environment. The development of proper attitudes towards the industrial part of the civilization is important. The farm boy should also have an opportunity to know of the contributions that have been made to his business by the experts in the experiment stations. At the same time, he should know the contribution that he is making in his business to the development of a unified citizenship in order that he may have an attitude of respect for the business in which he is engaging.

6. *Use of Leisure Time.* It is as much the business of the teacher of agriculture as it is any other teacher to stimulate in the student a desire for worthwhile means of enjoyment, such as music, art, literature, drama, social intercourse, appreciation of nature, plays, etc. All of this cannot be done as part of the teaching in agriculture, and it probably should not be, but the agriculture teacher should be constantly on the alert outside of class hours as well as during classes to see that the students have called to their attention the development in the better things of life. Thru the organization of students in agriculture, called the Future Farmers of America, there is a splendid opportunity to develop leadership and to work toward the development of social contact, a study of the simple drama, an appreciation for natural things as found in the community and for recreation in the form of play. The philosophy of those most vitally interested in rural development is one providing for a recreation that will include all individuals rather than towards the development of highly specialized teams for games at which most of the people will be on the side lines.

7. *Ethical Character.* The development of the character of individuals is as much the business of the teacher of agriculture as of any other teacher. Thru the dealings the farm boy has with his parents and neighbors in forming contracts, swapping work, securing loans, etc., the teacher of agriculture has a splendid opportunity to impress upon the boy his obligations towards those with whom he deals. Thru supervising the boy's practice in agriculture, the teacher has an opportunity to develop in the boy a sense of responsibility and initiative. He should direct the boy in his study of the relationship of agriculture and industry. The objectives of the farmer, if set up properly before the student, may well be emphasized as one of service. A discussion of this topic to include the relationship with the industries should also be made. The advantage of education should be emphasized, and the opportunity of schools should be called to his attention. The whole development of the individual as a citizen with the spirit of service should be the aim of the teacher of agriculture.

From the above it should seem that the teacher of vocational agriculture in the public high school has a very much greater reponsibility than teaching a vocation. The whole problem today is thot of as the training for citizenship. The agriculture teacher trains citizens, using agriculture as the means, in the same way that the teacher of English trains citizens using the subject matter of English as the means. Contacts may best be directed by teachers well trained in the subject matter they teach, but all teachers can and should help in the individual's development of proper attitudes in the larger things of life. All teachers are working toward the same end and should closely cooperate for this purpose.

Boys Use Demonstration Effectively

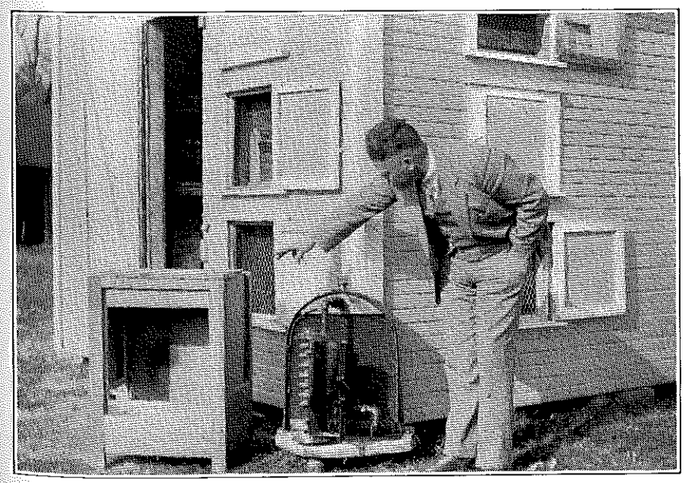
R. B. HUGUS
Instructor, Stewart, Ohio

THAT some hens averaged 25.4 eggs per month and some only 3.2 eggs per month, that the month in question was the month when eggs were selling at a high price, that the differences were due largely to the quality of chicks purchased and to the time of purchasing,—all these were observations from a demonstration carried out by boys in the livestock management course in vocational agriculture at Stewart, Ohio.

Each boy selected five pullets from his home flock and brought them to school where they were housed in separate pens in a modern heated and lighted poultry house, 12 by 12 feet, which had been constructed a few years ago by the class in agricultural engineering. All-night lights were used in the house, and a thermostatically controlled gas and hot water heater maintained a favorable temperature during even the coldest weather. All pullets were fed an approved ration on which accurate cost records were kept. Not only was there a contrast in production between the hens in the school poultry house, but there was likewise a contrast with the flocks at home. It is unnecessary to add that this demonstration, carried on thru the winter months, has convinced these boys of the importance of following the approved practices which this project in flock management supported.

A second valuable project of this school is the construction of a battery brooder, 1,600-chick capacity, which is housed in the farm shop. The first brooder built by the class was sold to a local poultryman. The present brooder is being used by 15 students to raise early-hatched pullets for their home flocks. A hot water heating system was constructed by using coils of pipe from a discarded hot water heater and an old automobile radiator.

The excellent results obtained by the boys in the various projects are permeating the agricultural practices in poultry management thruout the community.



The poultry house constructed by the agriculture class in engineering, the hot

Text Book Making

C. F. CLARK
Vocational Agriculture Instructor, Mize, Miss.

TWO years ago at the summer conference the teachers were told that the University would soon have a new bulletin on potatoes which would especially fit the needs of agriculture boys. It occurred to me that this and other good bulletins available would serve remarkably well as a real text book if they could be kept without the damaging results of studying single copies in class and then tying them back into bundles for later study. Last summer we interviewed several representatives of publishing houses relative to the making of a good binder for the purpose at a low cost. We used the one made by the Interstate Printing Company of Danville, Illinois. It is made of dark red press board, and for our use we have 1¼-inch posts. The covers are strongly made, with a book label on the inside back and a large yellow label on the front printed "MY AGRICULTURE BULLETINS, WINCHESTER COMMUNITY HIGH SCHOOL," and makes a very attractive book when filled with bulletins. This summer we procured from the University of Illinois, our member of the House of Representatives, and other sources, such bulletins as we would need in the Soils and Crops course, in the anticipated numbers. The local printing office loaned us a simultaneous two-hole punch with which the bulletins were made ready for their binder. The first day of school the boys punched and assembled their bulletins, and besides getting acquainted with the many sources of educational bulletins they did a service for themselves and their parents in making a text which we think is equal to any text in value, and at a cost to themselves of 35 cents. The binders and posts cost 25 cents each, and we used the University of Kentucky Circular 96, which costs 10 cents, as a basis of livestock judging.

Besides the bulletins furnished, each boy is required to study available lists of bulletins and get for himself at least three bulletins on his own enterprise. This will enable each student to make use of free educational advantages offered him. Each of the 33 boys in our two classes taking Soils and Crops will have at the end of the year a bound volume of at least 20 up-to-date bulletins at a cost to himself of 35 cents.—Henry B. Corrie, Winchester, Illinois—The Fan Mill.

Filing Reference Material

(Continued from page 187)

1. *Bulletin Storage Space*: The ordinary shelves made of 1 x 8 material, 12 inches apart, and each shelf made into a trough by setting in a 1 x 6 piece the length of the shelf, on each edge of the 1 x 8 shelf.

2. *Arrangement of Bulletins*: All bulletins are arranged according to subject matter. The main divisions are marked by 1 x 6 pieces about two inches taller than the bulletins. The subdivisions are marked by cardboards about an inch taller than the bulletins. Each bulletin has its number marked in red ink on the upper left-hand front cover.

3. *Index System*: I have tried the card index system, but I find that I get many more bulletins catalogued in a given length of time by listing the bulletins on 8½ x 11 sheets of paper, giving the title, number, state, and other information desired on a single line across the sheet. I find this, not only a faster method of cataloging, but in locating bulletins desired, the eye can follow the printed page faster than turning thru the cards.

4. *Bulletins Dealing with More Than One Subject*: Many valuable experiments are published in annual reports of experiment stations and not otherwise published. These annual reports and other bulletins dealing with more than one subject are filed under a "general" section of the Library in subdivisions for their respective states. The articles are indexed just as the bulletins are, except that the page is given. For instance: Alfalfa and Soybean Hay for Growing Heifers, ...p. 98..... Bimo. Bul. 120, Ohio. When I see this, I know immediately that this information is to be found on page 98 of the Bi-monthly Bulletin of the Ohio Experiment Station in the "Ohio" subdivision

Future Farmers of America

Flags and Farm Products to Share Honors At F. F. A. Monticello Dedication

A SAMPLE of farm products from every state in the Union, Hawaii, and Puerto Rico will be deposited on the steps of the west porch at Monticello, the home of Thomas Jefferson, by members of the Future Farmers of America who attend a pilgrimage of the organization there on June 14, Flag Day.

The visit of the Future Farmers will mark the wind-up of a three-day pilgrimage of the group to Washington and vicinity, which, it is expected, will be attended by approximately 3,000 members of the organization representing the 48 States, Puerto Rico, and Hawaii. The Monticello trip will be made for the express purpose of dedicating a room in Jefferson's home to the ideals of the Future Farmers of America, and the ceremony of depositing the sample farm products will be a feature of the dedicatory program.

A large flag, especially made for the occasion, will be placed on the porch of the Jefferson residence. As the name of the representative of the F. F. A. from each state is called, he will present his credentials from the Governor of his State, deposit his farm product sample, and hand to Vernon Howell, National President of the F. F. A. and master of ceremonies for the occasion, a star to be attached to the embryo flag. When this ceremony is finished, the flag will be complete with a star from every state. In addition, each F. F. A. representative will plant the flag of his state beside his farm product sample.

The program at Monticello will include dedicatory exercises at the amphitheatre, University of Virginia, at Charlottesville, which will be broadcast over a network of 45 radio stations, a trip thru the home and grounds at Monticello, and the placing of a wreath on the grave of Jefferson.

Before leaving for their homes, also, the F. F. A. members will visit Ash Lawn, the home of President James Monroe, and place a wreath on his statute.

Beside the trip to Monticello, the pilgrimage of the Future Farmers—June 12, 13, and 14—will include trips to points of interest in Washington, Arlington Cemetery, Alexandria, Va., and Mount Vernon, the home of George Washington. Special entertainment features have been arranged.

If Future Farmers now in school are successfully meeting the problems of their times, their business plans must be based on reason—on sound economic planning, and not on habit, tradition,

Camp Clements, the State Camp of the Future Farmers of Tennessee

G. B. THACKSTON, District Supervisor and State Camp Director

WHEN the state camp of the Future Farmers of Tennessee opened for its third season in July, 1932, it had changed its name to "Camp Clements,"—by order of the Fifth Annual Convention of the Tennessee Association.

It was D. M. Clements, state supervisor in Tennessee, who first conceived the idea of a Future Farmer owned and controlled recreational home, open to every Future Farmer in the state. And so it was but natural that the boys should name their camp for him.

In the three years since the Camp was first opened, it has grown beyond dreams of the builders. It is located on 26 acres of land,—donated by a staunch friend of the Future Farmers, Mr. N. A. Ward and his family,—on the banks of the beautiful Caney Fork River. It is in the foothills of the Cumberland Mountains, 2½ miles off of State Highway No. 1, and National Highway No. 70, and almost in the geographical center of the state.

Beautiful poplars, dogwoods, ash, beech, and other native trees border the campus, and well-graded driveways make every part of it available to autos. A baseball field, tennis courts, basketball and volleyball courts, are scattered over the campus. The Camp is 16 miles up-river from the dam of the Tennessee Power Company, and so there is little current, and swimming water is available at all depths. It is ideal for motorboating. Fishermen find bass,—both large and small mouth,—speckled and rainbow trout, bream, carp, and catfish.

The main building is three stories high, in addition to a basement floor, and is 80 x 40 feet. The first floor is the main auditorium, equipped with tables and chairs, radio, etc. In the rear of the auditorium is the kitchen, equipped with a large range, frigidaires, electric hot-plates, sinks, storage rooms, and all necessary kitchen utensils,—with a circular cafeteria-style counter. The basement floor is a large dining hall.

On the second and third floors are the sleeping quarters, equipped with 200 army-style, double decked beds with heavy cotton mattresses, and a roomy locker for each boy. This year a 16-foot addition was made on the west side, which became a delightful sleeping porch upstairs and a roomy recreational porch downstairs, opening out from the auditorium. There is a large bath house, with a complete system of sanitary

The operating personnel consists of a director, who is from the supervisory staff of the state department, an assistant director, who is the life-guard and in charge of athletics, a head cook, an assistant cook, and a helper. This small force can care for 200 boys at a time.

The boys come for a week, coming on Monday morning and leaving on Saturday. All boys from the same chapter—whether 1 or 50,—must come the same week, and their teacher comes with them. Reservations are made weeks in advance.

During the first two seasons, the boys paid $6 for the week. The cost was lowered to $5 this season, and it is hoped to lower it to $4 next year. The boy must bring his own bed clothing, towels, and such things. Everything else is furnished.

As the chapters arrive, each boy is registered and assigned to a bunk, locker, and mess-kit which he keeps for the week and checks-in before he leaves. Meals are served cafeteria style. The menus are planned by the state supervisor of home economics. A boy may come back for "seconds" just as long as he is hungry. He gets all he wants, and they eat plenty. A doctor has been called only twice during the three years of the Camp. They don't get sick.

Each boy must wash his own mess-kit, clean up his own bunk, and assist in keeping the building clean. Otherwise, there is no work,—it's just play, eat, and sleep.

And so it is a wonderful playground for Future Farmers,—but it is more than that.

Before the boys come to Camp, each chapter must select one of their number as their official representative for the week. He has absolute charge of that chapter,—the teacher is only the adviser. After all of the chapters arrive, the official representatives meet and organize themselves into a "Camp Chapter," electing a regular set of officers and appointing an executive and a program committee. These officers control and direct the Camp for that week. If there is misconduct of any kind, the executive committee hears the evidence and fixes and enforces the punishment. But the executive committee was not called together a single time during this season to pass upon breaks in discipline. It just didn't happen.

And that is the big educational feature

to every Future Farmer in Tennessee,—each boy has equal rights, and these rights must be respected. Boys who have never seen each other before soon become fast friends. Athletic contests between the chapters are a part of the activities for each day, and the rivalry is intense,—but it is friendly rivalry, governed by true sportsmanship, and trouble is unknown.

The boys are "on their own" and they gladly accept the responsibility.

There are no classes,—but it is a great school of citizenship.

Truly, it is a "Future Farmer's Paradise,"—this Camp Clements.

Stimulating The F. F. A.

R. A. FORDYCE
Adviser, North East Chapter, Pennsylvania

THE F. F. A. motivates the vocational agriculture course. The boy is led to feel that he is a part of a very real organization whose members are doing things in a big way. He is stimulated to greater efforts by the accomplishments of members from other parts of the state or nation.

We have a method of stimulating a boy's activity or rather of rewarding his accomplishments which we feel has worked quite well.

We started three years ago by giving a certificate of merit for various stipulated accomplishments. This went across fairly well but not in a big way. Then we stumbled onto the idea of giving F. F. A. sweater emblems to each boy who would earn one. A few of the ways by which they may be earned are—by becoming a Keystone Degree member, by winning a place in the Demonstration Contest at the State Show, by winning a place in the State Project Contest, by standing in the first 10 per cent of his class in grades.

This year we have added another means of obtaining one of these F. F. A. sweater emblems. The boy is given a certain number of points for each improved method he puts into practice on his home farm. To be more specific, we set up our objectives which we want to accomplish in poultry. A few of these objectives, stated very briefly, are—to cull flock, to brood chicks, to manage a laying flock, to keep accurate records, to build a brooder house.

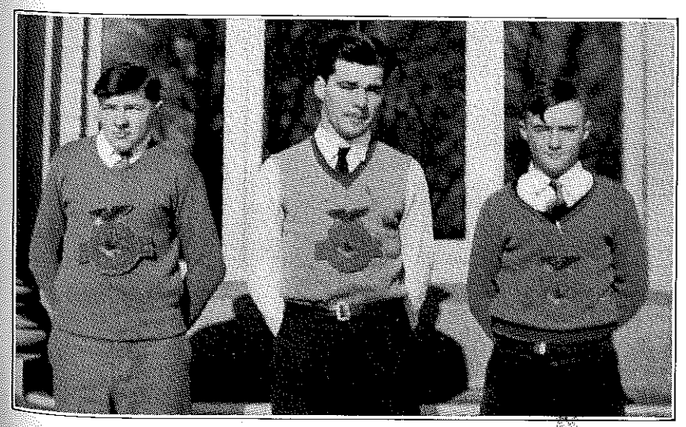
To each of these objectives we assign a value of a given number of points. For instance: culling, 5 points; brooding chicks, 10 points; managing laying flock, 25 points; keeping records, 10 points; building brooder house, 20 points.

Each course is outlined in the same way.

At the end of the year we shall check with the boy, and if he has met enough of the objectives to give him sufficient points (1000—5000 as the group sees fit to determine) he will be given a sweater emblem.

The emblems are the F. F. A. insignia with the local school letters attached. They are blue and gold, well made, attractive, and durable, and every boy who can earn one is proud to wear it.

The emblems cannot be worn unless they are earned. We buy the best at a cost of about $1.60.



Oklahoma's State Camp

R. FLOYD
Ass't Supervisor, Agricultural Education

THE F. F. A. chapters in Oklahoma owe a debt of gratitude to State Supervisor, D. M. Clements of Tennessee. In February 1928, he wrote "My Dream for the Future Farmers of Tennessee" in which he pictured a beautiful F. F. A. camp down on the Caney Fork River. This dream was so inspiring that we in Oklahoma dreamed of the same thing down on our beautiful Illinois River. That little spark touched things off.

At present, the State Association owns, free of debt, a well equipped camp on the Illinois River, near Watts, Oklahoma. It is 30 miles west of Arkansas University, Fayetteville.

The camp consists of 120 acres of deeded land, and 20 acres of leased land. It is very rough and covered almost entirely with good-sized timber. There is a large spring about 75 feet above the camp buildings which furnishes an abundant supply of pure water. The river frontage is about five-eights of a mile. The river contains one of the finest swimming holes in the state. On one side is a perpendicular rock bluff, rising 12 feet above water 18 feet deep. The swimming hole slopes to a gravel bar on the other side of the river and to shallows at each end.

The old pioneer trail from Joplin, Missouri, to Tahlequah, Indian Territory, crossed the river at the lower shallow and passed along the bluff directly above the swimming hole.

A large barn was converted into a kitchen, dining hall, and porch below, with a bunk room above that will accommodate 30 boys. One large cobblestone cabin has been erected. It is planned to erect another such cabin in 1933. Steel cots and cotton mattresses are provided. The boys arrive at Camp on Monday afternoon and leave Saturday morning.

In 1930, the first summer the camp was operated, the charge was $5 per boy; 76 attended. In 1931 the fee was $4, and 449 attended. This past summer the rate was $3.50, and 460 attended. It has been found most satisfactory to operate the camp for seven weeks during the summer.

Chapters attending are urged to make some type of camp improvement while there. The teachers and director score and rate the improvement made. A suitable trophy is awarded the school scoring highest for the entire summer. Chapters are scored on: attendance, a bonus being given for distance; camp spirit; athletics; camp improvement.

Last summer, Robert L. Chambers, coach of athletics in Male High School, Louisville, Kentucky, was employed as camp director. He was a big addition to the camp and has been re-employed for 1933.

Mr. Chambers developed a "superman" contest which attracted plenty of interest among F. F. A. members and teachers as well. This contest made it easy to rate each boy by the score or point system. The boy with the highest score was declared "State Champion F. F. A. Superman."

The events counting on the score were: 100-yard dash, 50-yard dash, shot put, overhead shot put, football pass, football punt, baseball throw, hop-step-and-jump, broad jump, and chin-up. The perfect score in each event was 1000 points, e. g., 20 chin-ups count 1000 points, 10 count 500, and 1 counts 50 points. The standard for the 100-yard dash was 11 seconds. Other events were in like proportion. A swim event will probably be added next year. This contest makes it possible to keep the boys busy when the rain spoils the baseball tournament and the like.

Our camp is a big success. It is self supporting. It has helped increase our F. F. A. membership, and in many schools the enrollment has increased because of the camp privilege. We thoroly endorse this activity for all state associations.

Gregory Chapter South Dakota Sponsors Rural School Day

LEWIS E. HALVERSON
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THREE years ago when the Gregory Chapter of Future Farmers of America was organized, they adopted as a part of their program the sponsoring of an annual "Rural School Day."

This was to be a day when all of the boys in the seventh and eighth grades of the rural schools in the community

judging contest and be entertained by the chapter. The day met with so much favor, both in town and in the country, that the home economics and commercial departments of the school joined in with us to make it a bigger and better day.

The contest for this year was the biggest and best ever held. Forty-five boys and girls of the rural schools took part in the various contests, and 165 people were present for the afternoon program.

Prizes are awarded for places in the contest. A prize is also given for the school having the largest percentage representation and for the contestant coming the longest distance. We have found that it pays to give good prizes. In the past, ours have consisted of fountain pens and eversharp pencils. The boys and girls have use for them every day in school, and it helps to advertise our day, as they are only too glad to tell their school mates where they got them.

The contest in the agricultural department this year consisted of the judging of corn, oats, barley, wheat, and potatoes and the identification of common farm tools.

Students have charge of the whole affair and receive some valuable training.

Occupational Distribution of High School Graduates

(Cotinued from page 182)

The stock market collapse came in the fall of 1929. Before that time, jobs and money were plentiful; since, less plentiful. This would be expected to influence occupational choice, and some change was apparent altho not striking.

The standing for commercial graduates is almost identical for the 1928-29 group and the 1930-31 group, and lower than for vocational agriculture and "college preparation." Not so many of the "college entrance" graduates were able to go on to college in 1930 and 1931 as formerly. Yet the proportion who were able to go to college and utilize their training was greater than for the commercial graduates, but always less than those who elected agriculture. It would seem that the economic depression did not materially change the situation.

More than one-half of the "college entrance" graduates who were reared on the farm are now farming (Table IV). The same is true of the "commercial" graduates. Only 5.7 percent of all farm-reared graduates went to college other than an agricultural college, the field of their original choice. Of the "college entrance" graduates, 15.8 percent are following the field of their original choice. Of the "commercial" graduates, 7.2 percent are following their chosen fields. Of the vocational agriculture graduates, 77.5 per cent are employed in agriculture of some kind—their chosen field.

Stated differently, among farm-reared boys, a vocational agriculture graduate has a 390 per cent greater chance than the "college entrance" graduate and a 976 per cent greater chance than the commercial graduate of having chosen for training the field in which he will be employed.

Several questions are suggested. Would vocational agriculture be of greater benefit to the farm-reared boys who elected other curriculums? Could cised more promptly and efficiently? Would vocational agriculture have served as well as the commercial curriculum for all the occupations into which the commercial graduates entered? Would vocational agriculture have served as well as the "college entrance" curriculum for all the occupations which the "college entrance" graduates followed? Are the vocational agriculture graduates as well prepared for the non-agricultural occupations as they would have been had they taken the commercial or the "college entrance" curriculum?

Summary

1. Vocational agriculture is functioning better than the other curriculums in furnishing to its graduates a training program in line with the kind of employment entered.
2. The "commercial" curriculum is functioning very poorly in this respect in rural high schools, particularly for boy graduates.
3. Very few of the farm-reared boys who graduate in the "college entrance" or the commercial training curriculums are following a field for which they prepared.
4. On the other hand, a majority of the farm-reared boys who graduated in the "college entrance" or the commercial curriculums are farming.
5. Very few town-reared boys graduate in vocational agriculture, and as would be expected, very few of them are employed in agriculture.
6. A large proportion of the girls who graduate from the "college entrance" and the commercial curriculums are in occupations where home economics would have been of value.

Editor's Note: We appreciate this paper of Mr. Young's on a topic of interest to every reader. It is based on a graduate study he has made at Cornell. Despite many appeals, digests of research have been secured from only a few states in the eastern area. Surely there is more research of value being done.—E. C. M.

Responsibility for Training for Agricultural Leadership

(Continued from page 183)

after the fashion of European peasantries and practicing a type of agriculture that was very primitive. But about 1865 a profound change began in rural Denmark. Today we find farmers owning their land. They are said to be the best farmers in the world. Along with this technical advance, the Danish rural population has developed an intelligence that has made it possible for it to create and successfully operate vast co-operative enterprises. When asked for the secret of this change, from all sides came a single answer: It is the work of the People's High Schools, the rural high schools are responsible.

We have in the United States many village and consolidated high schools. These schools are in a rural setting and, if they should become rural minded, they could do for us what the rural schools did for Denmark. They could assist materially in bringing to the farmer a fair share of the desirable things or satisfactions of life such as "good food, good clothing, a good house, opportunities for education, leisure time, recreation and art, and friendships or opportunities for associating with other persons."[3]

But these things will not come to pass unless we train leaders and followers to bring them to pass. Problems are not solved by ignorance. Neither are they solved by studying material foreign to the problem. If a doctor is to cure human ills, he must study medicine. If we are to cure the ills of agriculture, we must study the problems of rural life.

Every village and consolidated high school in this country should offer rural life courses and prepare boys and girls to be capable and unselfish leaders in rural life. Many schools today are not aware of their opportunities and are doing no more to help rural life than if they were located in the heart of a great city. There are, on the other hand, schools that are making a very definite effort to train leaders. They have caught a vision of their responsibilities. It is hoped that these schools may grow better day by day and that they will help other schools to join in the crusade for better life on the farm.

The case may be summed up as follows. (1) We must have leaders in all walks of life. (2) Rural life seems to be especially in need of leaders. (3) The schools can train leaders effectively if they will. (4) Village and consolidated schools should bestir themselves and accept their responsibility for training leaders of rural life and agriculture.

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[3] *Dr. Carl C. Taylor in an address at Ames, Iowa, October* 20, 1932.

Keeping Interest in Vocational Agriculture

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KEEPING the interest in agriculture from lagging during the hot summer months is one of the big problems that usually confronts a vocational agriculture teacher. I find that using the agriculture classroom as a public library during the summer months has much to do with keeping up interest.

The vocational agriculture classroom is left open at all times during the summer after school session is over, and is free to any one in the community. It is well supplied with seats and tables. The library is supplied with 200 volumes of agricultural books. These cover almost all phases of farm life. Thirty-five leading farm papers and magazines are arranged according to latest issues. Four thousand agricultural bulletins cover all points of farm life. A few books on miscellaneous subjects, farm machinery charts, and agricultural pictures complete the library classroom. Altho this practice has been carried on all summer and advantage of the privilege was taken by many farmers and farm boys, no books or papers have been carried away or lost.

I find that the plan stimulates interest, teaches farmers to be more familiar with the work, teaches them to work out problems for themselves, and provides for idle hours to be enjoyed in