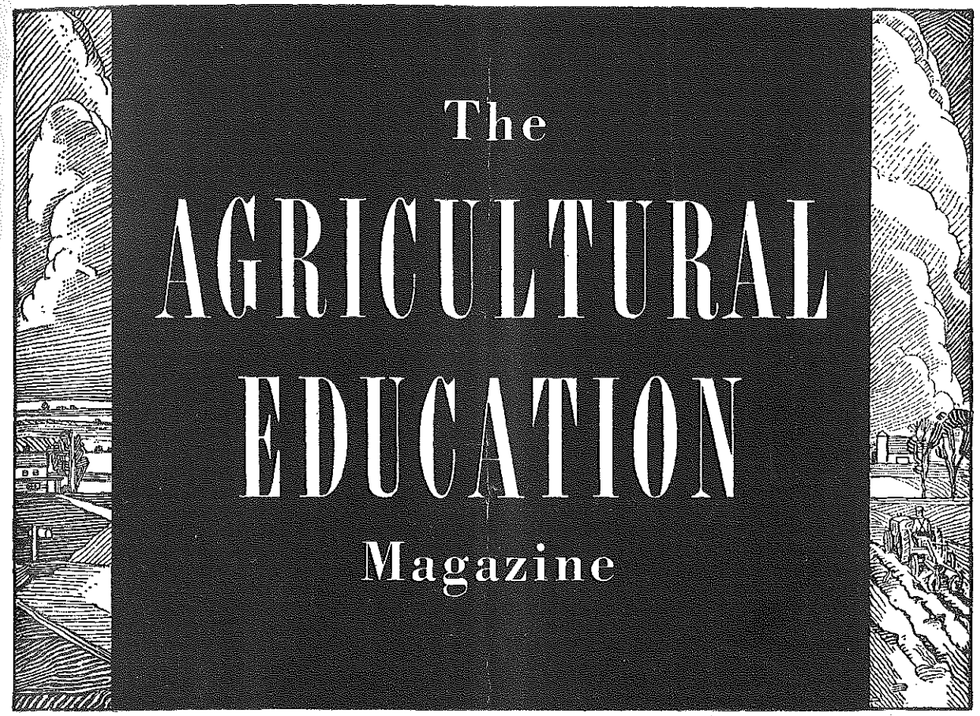
Vol. 16 January, 1944 No. 7



"SOIL, babies, education, and religion are the foundation stones of any permanent economic and social system."

—Roger W. Babson, in his recent syndicated column.

The Agricultural Education Magazine

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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Entered as second-class matter January 21, 1929, under Act of Congress, March 3, 1879, at the post office, Des Moines, Iowa.

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Editorial Comment

Freedom of Economic Opportunity

THE concept of freedom which involves freedom of speech and freedom of religious choices always emerges boldly as an American ideal in times of national stress. In fact, it was this concept of freedom that brought about the permanent colonization of this continent more than a century before the birth of the nation, and it has been retained thruout the years as the soul of American democracy. Nevertheless, this ideal becomes blurred and submerged in political bickerings and pressure group activities even during times of comparative tranquility. In fact, while the Constitution itself was being formulated immediately after the Revolution, such bickering kept this concept from being written into that document. The Bill of Rights was added later as specific amendments which provide for freedom of speech and freedom of religious choice according to the convictions of the individual.

In these troublous times we are again talking much about these and other freedoms for the individual which reside in the American concept. Particularly are we talking about freedom of economic opportunity or freedom from want.

Freedom from want is not a new idea within the American concept of individual freedom. It was carefully developed and first stated by American businessmen and statesmen 125 years ago. Mathew Carey, a prominent Philadelphia publisher, enunciated the philosophy underlying freedom from want. He saw in the agrarian and maritime economy of his day great limitations for free vocational choice, and he challenged: "How can the individual in a democracy find freedom unless he has opportunity to choose his vocation, or how can a nation take its place in the world of affairs unless it provides opportunity for the development of the varying abilities of its people to produce. Opportunities in farming and commerce are not enough."

Opportunity for all to produce commodities and services according to the abilities of each was the concept of freedom from want put forth by Carey in that far-off day.

To carry out this philosophy of freedom of economic opportunity for the individual, Carey appealed to the wealthy and to the worker alike, and to the statesmen of his time. His philosophy met with adverse criticism from the shippers of the Atlantic seaboard, but his message was received with enthusiasm as he preached his gospel in the Ohio Valley and the hinter lands of the Central States.

Carey also got the active attention of the foremost American statesmen of that day, and together they discussed his philosophy and planned ways and means of providing economic opportunity for all. They called this plan the "American System." It was highly nationalistic, but it was based on the guiding principle that an individual cannot be free unless he have opportunity to choose his vocation and participate in "productive pursuits."

Henry Clay became the champion of Carey's plan in the halls of Congress. He formulated the legislation that the nation hoped would provide ways and means of accomplishing Carey's concept of freedom of economic opportunity for the individual.

If the American System has failed to accomplish its purpose, it is not because of the ideals in which it was conceived, but rather because of the ways and means that were employed to carry out these ideals. The protective tariff, as the ways and means, reeked with injustices within and without the confines of the nation from the very beginning, but it has persisted until the present moment. Under Carey's philosophy, freedom from want—opportunity for the individual to choose and carry on vocational activities—was the central idea. Profits for the cash till were secondary but a recognized necessity.

The American System as planned by Carey and Clay was to be revised from time to time in order that it might be kept in tune with the ideals of freedom of economic opportunity for the individual in a developing society. But during the long period of relative national security we have lost sight of the kernel of this old American ideal. We have spent our time, strength, and substance in bickering over secondary considerations.

world, we are again discussing the ideals of American freedom, particularly the ideal of freedom of economic opportunity. As we review this old American concept, the workers in vocational education should find a deep and lasting interest in keeping the issue clear now and in the postwar days immediately ahead. Herein lies the kernel of economic security and the future demands for vocational education.—J. T. W.

Whither Teacher Education in the Rural War Production Worker Program?

THE year 1942-43 will probably be put down in the history of agricultural education as one in which there was a record number of adult classes for farmers taught by skilled farmers and tradesmen, with little or no professional training for teaching. According to the U. S. Office of Education 64,958 Rural War Production Worker Courses were taught by special teachers and in some cases by teachers of agriculture. These courses were supervised by teachers of agriculture who were professionally trained as teachers, but who have also recently had the responsibility of training the special teachers of the courses. They have had to do this, in most cases, in addition to their regular, full-time load.

There is much evidence that the special, lay teachers of adult courses used in the O.S.Y.A. program have done a commendable job. There is also much evidence, however, that they were inadequately prepared professionally for doing the job.

Special Teachers Have No Professional Training

In one state some interesting data were compiled relative to training of special teachers used in 1942-43. It was found that 83 percent of the special teachers of farm machinery and mechanical courses and 55 percent of the teachers of commodity courses had no more than a high-school education. Eighty-seven percent of the teachers of farm-machinery and mechanical courses and 88 percent of the teachers of commodity courses had never had any courses in education or psychology to prepare them for teaching, and 79 percent of both groups had had no teaching experience.

If this is typical for the country at large we may conclude that the great majority of special teachers of O.S.Y.A. courses used during the past year have not had the slightest semblance of what leaders in agricultural education have come to recognize as standard professional education for teaching vocational agriculture.

No Provisions for Training Teachers

The plan for administration of the Rural War Production Worker Program made no provision for teacher-training, other than that the local teacher of vocational agriculture might be employed as supervisor of the instruction, assisted by state supervisors. By implication, at least, he was charged with responsibility for in-service training. Has this arrangement resulted in trained teachers and in the quality of instruction demanded? The answer usually given to this question is to "look at the record." It would appear that the results of the program, according to the reports, constitute substantial evidence that many special teachers of adult classes carried on creditable instruction. But the real issue is, did they do *as good* a job of instructing as *was needed* to help win the war? Could they have done far better with added training?

How much more could be contributed to the Food Production Program thru adult production courses if special teachers of these courses could be made more skillful in the use of conference procedure; if special teachers of farm-machinery repairing were trained to make job breakdowns, to give demonstrations effectively, and to supervise repair work according to best modern methods of shop supervision; if all special teachers

Professional

S. S. SUTHERLAND — R. W. GREGORY

An Ag Man Anchors Aweigh

L. J. HAYDEN, Lt. (j.g.) USNR

It is a far cry from a teacher of vocational agriculture to a commissioned officer in the greatest Navy afloat. Or is it? After envisioning oneself trying to keep upright on the deck of a rolling man-of-war in one of our two oceans, the first illusion that has to be corrected is that a very great part of the Navy is not afloat and that many of its wartime officers will never get afloat for active duty.

New Job

After two months absence from the agriculture classroom we suddenly find ourselves again at the doors of learning in a small mid-west college that the Navy has selected as a seat of basic training for a part of its future officers. Our job is to guide the progress of this training and to insure that basic precepts which the Navy has requested shall be taught.

And so we find ourselves at the enrolling desk where young men are presenting formal orders, direct from the Bureau of Navy Personnel, and reporting for duty, 80 percent of them for the first time. As the line of bright-faced, eager, young lads moves along, still in civilian clothes, we spot several F. F. A. pins. Some pins indicate that they were "green hands" and some indicate that they were "state farmers." We glance at their orders a second time and see that they are from Illinois, Washington, Iowa, Minnesota, Oregon, Ohio, and many other states. We say "were" because from this moment on they are Apprentice Seamen and this rating they must carry until their training in the Navy V-12 program is completed. (For landlubbers not versed in Navy lore we hasten to explain that the Apprentice Seamen are to the Navy as the green hand is to the Future Farmers of America, or the "buck" private is to the Army.)

Still in Business of Guidance

Then, as the line moves along, four bluejackets appear before the desk. A glance shows that they are as weather beaten as a Kansas farmer in August. The left arm of each flashes the insignia of a rated petty officer. One man steps smartly forward and states, "Carroll, Pittman, Hall, and Russell reporting for duty, sir. I am Russell and am in charge of the detail. Here are our orders and records, sir."

We are interested in the experience these men have had and question them in the order listed. Much of what they told in the next few sentences is not yet public information but we will just mention that one of them proudly wears three service ribbons and the yellow one, indicating service in the Asiatic theater of war, has three bronze stars on it. When we

> Lt. Hayden is a graduate of The University of Illinois, has an M. S. degree from The Pennsylvania State College, and has completed a considerable part of the work for his doctorate at Cornell University. For seven years previous to entering the service he was principal and teacher of vocational agriculture at the Charlestown Township High School, Wellsboro, Pennsylvania. He resigned his teaching position in March, 1943, to enter the Navy, was sent to Columbia University for indoctrination training and then assigned to his present location, Wabash College, Crawfordsville, Indiana, where he directs the work of a Navy V-12 Unit.—*Editor*

replies, "Oh, I haven't been anywhere. Since December, 1941, I have been stationed at Pearl Harbor and Midway." As he moved on we looked closer and sure enough, that insignia told that he was a first class radio operator. That rating, on those stations, meant he was leaving a job that paid nearly $175 per month and keep. He was willing to sacrifice $125 a month to go to school to become a commissioned officer in engineering.

Such was the cross-section of the cream of America's youth that came to us on July 1, all of them hand-picked and anxious to get on with the job that was ahead. They presented many problems and difficulties and soon we began to see the reason why we had been sent here for this particular assignment, for these were the seniors from last year's graduating class, and they were facing the same difficulties.

Boys Want Action

We soon found that the most serious problem came from an unexpected quarter. The men who had seen actual service in the Navy and had been chosen upon the recommendation of their commanding officers were the men that needed real guidance. To these men the shock of settling down to the inactive life of a college student was intolerable at first. They had witnessed at first hand the urgency of war and after we had carefully explained that they were here for at least four terms (16 months) they shook their heads in dismay and soon came back with the query, "What's the chances for a transfer to general detail?" Later we did have to transfer some for disciplinary and for scholastic reasons, but we were gratified to discover that by far the majority of their superior officers had been right and that these young men were potential officer material. Those their work with far more zeal than those fresh from college and high school. They actually begrudged having to spend part of an evening away from their books for mass meeting movies.

Big Bill Keefe is a case in point. Keefe had had only one mathematics course, which he had taken six years ago by correspondence. He came in after three weeks with a serious and worried look and requested to be dropped from the course before he "flunked it." We talked for some time and, according to his story, he was hopelessly lost. It did sound bad. We advised the only obvious thing left, "Just do the best you can, Seaman Keefe, and after the grades come out next week, we will have the evidence first hand and then we shall do something about it officially." His grade was reported the next week as a "B." At the end of the half way mark some of the former students have found out that these sailors are tough competition!

Back to that long line of recruits on July 1. Our job was more than to enroll Joe in college. Assignment to classes was only one item on a long list which appeared on the "Check Off Sheet." His orders must be examined, and if found correct, signed in four places on each of four copies. His physical report must be examined and sent to the Medical Officer where he is given another physical examination to see if the previous examiners had missed anything. (A few men were rejected from the program at this point.) Then his pay account has to be taken up and sent to the Disbursing Officer. This is vital to the boy because it must be in perfect order before he can receive his fifty dollars on pay day. (That is the wage of all apprentice seamen.) He must receive his clothing issue and we must give him a billet. And on July 1 we had neither for him!

Bunks were available for only about one-half of the men. No clothing had arrived and some boys came with the expectation of throwing away what they were wearing and not bothering to send such ragged and dirty outfits home. Did not the Navy furnish uniforms for all members? Anyway, they expected to have outgrown any "civies" they owned before the war was over. Little had these boys anticipated that it would be three weeks before they were all in uniform!

Bunks finally arrived on July 2 and enough blankets for all to have one each. They had to set up their own bunks, and even help the storekeeper stencil USN on every bunk and on every blanket before it left the stock room. But before the bunks could even be set up the quarters had to be cleaned. Yes, these fraternity houses lacked reaching the standard of cleanliness required by the Navy's Medical Officer! The mothers of college boys should have visited the kitchens from which the food came to feed their sons in college last year. "I'll not permit you to put a single boy in that house," shouted the Doctor, "until everything

and the whole place swabbed with hot lye water!" Hot water and lye! Yes, teachers of agriculture, the Navy knows about it, too!

So the trainees swabbed it out and cleaned the place from hold to topsail until the bare boards appeared raw but sanitary. All this was done by the men between their visits to the class scheduling officer, sick bay, book issue room, and the storeroom, there to inquire how they were to launder and dry the clothes they were wearing! Yet, at 1800 (6:00 p.m.) on July 1, all companies were in military formation and marched to mess to that cadence they shall never forget tho they live as long as Methuselah: "Hep-2-3-4, Hep-2-3-4!"

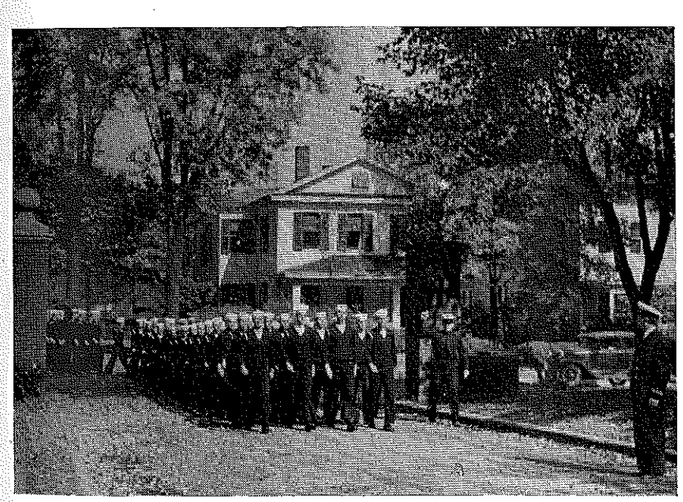
At the Mess Hall the painter got down, folded up his ladder, and moved out of the entrance so the men of the Navy could enter. Inside, the carpenter erected a barrier around the unfinished section of the floor and the bus boys kicked packing boxes out of the path of the cook who was bringing in huge kettles of soup, boilers filled with potatoes, and trays of roast beef. The men were fed—not as much as they wanted, nor the kind of food mother had prepared at home, oh, such a long time ago, but fed, nonetheless!

Hard Training

They are still healthy and growing! Some lost as much as 20 pounds before they started gaining it in other spots. Other boys, such as pale-faced Ray Howland, began to gain at once and Ray thinks the food is wonderful. Yesterday we noticed how ruddy Ray's cheeks are. He tells us he weighs 16 pounds more than he did on July 1.

The Navy must have adopted General Grant's philosophy because they believe in just pounding on that line until the job is done and they tell you in the beginning that the Navy "pays off in results accomplished."

There is no such thing as union hours and the Secretary of Navy says we shall recognize only two holidays, Christmas and the Fourth of July. So, the only way out of the above mess was to keep wading thru. And the strange part was



A former Ag. teacher drills V-12 cadets

nation. From seven in the morning until the night watchman made his second trip around we just kept plowing along. Sunday was just another day in which to get a lot done that must be done before classes started.

Yesterday we had a review and Captain's inspection. In the front rank of Company 1 was the State Farmer (F.F. A.) from Washington, Ray Howland, Tony Poneta, of the coal mining Ponetas, and the son of a Chicago occulist. **But** one would not be able to determine the past history of any of these men now. Three months of that "Hip, Hipping" had unified them as four straight lads, chins up, shoulders back, and stepping briskly as one body. As the companies moved past, we must confess that we could not inspect closely because of a misty clouding of the eyes. We were so proud of what they had done for themselves in the three months.

They do not have to drill a great deal in this college program. The manual says that they shall be drilled only one hour each week but the boys have pride and they drill themselves as much as an hour each evening before chow. We thought that our own pride prejudiced us until a visiting ensign back in the stands remarked, "They look just as good as we did at Midshipman School."

It has not been easy for our men to make this advancement. They must carry 17 hours of regular semester college credits in addition to a strenuous physical fitness program which takes one and one-half hours of each day's time. Their day begins at 6:00 o'clock reveille. They must be out for morning exercises at 6:15, run back from the athletic field, clean their room, dress, and be ready to march to chow at 7:15.

Contrast in Teaching Procedures

If the bed is not made they get demerits, if the wastebasket is not emptied they get demerits, if their caps are dirty they get demerits, if they smoke in public they get demerits, and if they don't carry demerit cards to surrender when a deficiency is found they get more demerits! Always they are told, "Don't do this. They never earn merits, it seems.

Is this in line with the modern pedagogy practiced on students in high schools? Indeed, it is far from it. But it works! We cannot discuss here the merits of the system nor its educational possibilities but we confess we are confused and much of our educational theory is shot to the four winds. The problems of discipline are just "out" in the Navy classroom, so the professors tell us. The Dean sits in his office across the hall, wearing his pants shiny but thinking of other things than problem cases for he just doesn't have any. One teacher told us the joy he experienced at not having any absentees from class. "Why", he explained, "I used to waste five minutes in lots of classes finding out who was absent. Now I find myself forgetting to take roll because so seldom is anyone absent."

The boys have equal opportunity for education in our Naval Training Program. Money or social position can neither help nor hinder them. They *must* get along with their fellows and any admiration they receive from their shipmates they must surely earn.

The Navy looks upon each as an individual that is deserving of having his chance for further education. As long as he can discipline himself and control himself to mold his action to a prescribed pattern and has the intelligence and industry to scale the scholastic obstacles he meets, then he will continue in the program. Years and generations of experience have convinced the admirals that this road is one which all Navy men must travel before becoming men, and before becoming fit to be officers in the United States Navy.

In the postwar era will society adopt the philosophy that only those who are deserving will and shall be educated, regardless of wealth and social position? If it makes better men for the Navy, will it make better men for agriculture, business, and the professions? Will the colleges be content to go back to the soft pedagogy and the rowdy "Joe College" spirit? Will the secondary schools keep giving their sugar-coated doses of self control, dicipline, respect, and education as in the past?

These are but a few of the questions we find popping up in our mind as we watch the autumn leaves turn and as plans are formulated to receive a new consignment of V-12 trainees in this streamlined system of giving boys a basic college education before they become officers in our Navy.

Before all else we must learn how to use our American earth wisely with the greatest profit to all.—Carlton Beals

The difference between a disciplined mind and an undisciplined mind is this: One naturally is inclined to *seek the truth;* the other to *hold an opinion.*—Rev. Robert Russel Wicks, Dean of the Princeton University Chapel

He who would be the author of the peace of the world must first begin by being a farmer.—Selected

Thrice blessed is the man who has the ability to work, the desire to work, and a job he likes.

A rule is given us because we lack intelligence; a principle because we have it.

Methods

G. P. DEYOE

The Fundamentals of Educational Method

J. A. STARRAK, Teacher Education, Iowa State College

J. A. Starrak

THE basic problems in education are two: (1) What should we teach? and (2) How should we teach it? All other questions and problems, and they are legion, are subordinate to these two. With these two problems properly solved and implemented, the effectiveness of our instruction would be guaranteed.

In this article it is proposed that we should consider the second question, "How should we teach?" And since it may be correctly assumed that our instructional methods at present are not 100 percent effective, the question may well become for each one of us, "How can I increase the effectiveness of my instruction?"

The How of Teaching

Sometimes the best way of arriving at the answer to a question is to ask other questions, and for the present let us adopt this plan. Our first question is: What do we mean by effective instruction? or, When is our teaching effective?

Among the various tentative answers which, I trust, are coming into your respective minds, may I inject the following: *Our teaching may be regarded as effective when, and only when, it has produced in our students the changes which we desire to make and when those changes are relatively permanent.*

It is freely admitted that this is a rather high standard and one which we have not employed in the past, for we have been pretty well satisfied if our students learned some facts out of a book or acquired some ability or technique and retained the same until the end of the course, regardless of whether or not they had applied what they had learned in the everyday conduct of their lives. It is, however, a defensible standard or goal, and if accepted leads to our next question: How are permanent changes in human behavior brought about? What are the basic elements or factors which normally are instrumental in producing changes in human behavior and in making such changes permanent?

Conflicting Psychologies

The search for the answer to this question takes us, of course, into the field of human psychology, where, sad to relate, the numerous exponents of the various schools of thought have succeeded, by their energetic advocation of their respective conflicting theories, in

> In this article, Dr. Starrak stresses some "fundamental ideas" in method, rather than specific teaching devices. He recognizes that the latter must be used to implement the ideas which he has presented. However, he feels that each teacher should understand and keep in mind the fundamental ideas, principles, or conditions, as described in this article, which must be involved in any teaching situation or device if it is to be effective.
>
> *Editor*

hopeless confusion. One reason is, of course, the extreme complexity of the human being, but another undoubtedly is exemplified in the story of the three blind men who went to see the elephant. The exponents of each school of psychology have enthusiastically seized upon some theory or concept which may serve to explain quite well a single phase of human behavior and have thereafter tried to stretch it to explain all other phases, and at the same time refused to recognize other and perhaps equally well-supported theories which might explain more adequately the phases or areas of human reaction in question.

Some years ago I decided that, in view of the existence of these conflicting schools, and in the belief that probably each of them had something to contribute toward my understanding of human behavior, the smart thing to do was to select from each those ideas which seemed to be quite well-supported by experimental data, which were not in disharmony with one another, and which seemed to be supported, or at least not contradicted, by personal experience and observation.

From the theories and concepts thus selected, I tried to formulate what would seem to be a tenable and practicable "system" of psychological thought. This system is expressed in the following chart Number I:

I am not very proud of this chart since it obviously possesses many deficiencies. In it one looks in vain for many of the so-called laws of learning which we have been taught. I am hopeful that some readers may be challenged enough by it to suggest needed revisions and send them along to me. In the meantime, some interpretation of the chart may be in order.

First: The plus signs are important for they are intended to emphasize the unitary character of the human organism. The very numerous elements involved in human behavior are grouped into the three categories along the top level of the chart. These three groups of factors must be regarded as being very intimately related, so much so that no one reaction or activity can occur in any one of them without affecting the other two. Therefore, any stimulus which makes an impression on a person affects all three areas in a greater or less degree. When the child comes to school, he does not come as a cold, white, intellectual mechanism, nor has he left behind him at home his emotional apparatus and his physical organism. Instead, he brings along with him his fears and hopes, his loves and his hates, his tummy-aches, his nutritional deficiencies, and his mal-functioning glands, and they all operate to influence

Chart I

Permanent Changes in Human Behavior

are caused by

Affective or Emotional Activity	+ Intellectual or Mental Activities	+ Physical, Muscular, and Organic Activity
↓	↓ which express themselves as	↓
Emotionalized Attitudes and Goals	+ Purposeful Reflective Thought	+ Overt Physical Action
↓	↓ which produce such educational outcomes as	↓
Interests Ideals Appreciations	+ Understandings, Thinking Abilities, and Skills	+ Physical Abilities and Skills
↓	↓ and are fullfilled in wholesome, abundant, and constructive lives thru	↓
Emotionalized Sensitivities, Values, Ideals,	Sound conclusions, Convictions, Procedures, and Plans	Efficient Habits, Techniques,

the effectiveness of his learning.

This close relationship, of course, carries thruout the other levels of the chart. Our emotional attitudes affect the quality of our thinking and the operation and tone of our physical mechanism. Conversely, the quality of our thinking determines quite largely the extent and character of our emotional responses as well as the efficiency of our muscular reactions. And in like fashion the condition of our physical mechanism influences strongly our emotional and our intellectual activities.

Translated in terms of educational method, all this implies that the learning situations we devise for our students must stimulate and give direction to the appropriate emotional, intellectual, and physical responses.

Emotional Activity

Second: Of course, I should recognize that this is all "old stuff" to you and that I am about to add to the coals I have already brought to Newcastle by reminding you of the tremendous power of emotion in human behavior. This is one of the chief lessons taught by the history of man, and modern psychology joins in emphasizing the powerful role of emotion in our individual and collective lives. Herbert Spencer's statement "that our emotions are our master, and our intellect the servant" is only too true, as is also the one which follows by the same writer, *i. e.*, "We have been educating the servant and neglecting the master." It would appear that we teachers have been so deeply impressed with the potentialities of the scientific method operating thru disciplined intellects that we have tended to disregard the emotional development of our students.

The plain fact is that we have delegated to the motion picture, the pulp magazine, the comic strip, and the radio thrillers the tremendously important task of educating the emotions of our children, and they have done a magnificently effective, if not a *good* job of it. Perhaps we should stoop from our ivory towers to examine the techniques these other agencies employ with so much success and try to adapt them to our materials and objectives. There is good reason to believe that the most important task facing educators today is the proper education of the emotions.

Thinking

Third: The influence of thought upon human behavior is also well demonstrated by human experience, and makes the development of the thinking capacity of our students and the inculcation of the habit of thinking the major responsibilities of teachers.

But this is no simple task. Exhorting our students to think and reproving them when they fail to think are not enough. One too often hears in school such assignments as, "Read the next chapter and think hard about it." The brightest students may by chance discover and define worth-while problems and questions, and to the extent they do so, for them the assignment may have some value; but the majority need assistance in discovering and defining problems. Obviously, to insure that the majority of our students think deeply and soundly, we must confront them with challenging problematic

day by real people in a real world. These problematic situations must also be of appropriate difficulty and scope. Furthermore, they must not be isolated situations having no relationship to one another, but instead be closely integrated in such a fashion that each grows out of those preceding, as real life situations always do.

Carrying Out Plans

Fourth: The desirability of carrying out into intelligent action the decisions, plans, and techniques arrived at by ante-

been one of the major tenets of the philosophy of vocational education, and it is probably just as applicable to other types of school work. And perhaps the main educational benefit to be derived from this activity is not the development of manipulative ability, but rather the increased understanding and seasoned judgment which will result from the opportunity to test the quality of the decisions, plans, and techniques previously arrived at thru thought, by observing their application to practical life situations. It is imperative, therefore, in our teaching that we do not deprive our stu-

Cull Your Library

IVAN G. FAY, Supervisor of Teacher Training in Agriculture, Madison, Wisconsin

I. G. Fay

THE teacher was leading a discussion on the immediate care of day-old chicks. He asked a question as to when they first should be fed. A keen-eyed boy promptly answered that no feed of any kind should be given them until they were at least 48 hours old. When asked the reason for his belief, he answered, "The book says so," stepped to the reference library and taking down a book on poultry pointed to a clear statement that chicks should be given no feed until their third day,—a text on poultry copyrighted in 1912.

Need for Up-To-Date Information

In no field has there been more rapid advancement in scientific methods than in agriculture. Our experiment stations and our research laboratories are putting in our hands each month new scientific discoveries to be carried by us to our boys and to the adult farmers in our communities for immediate application—new varieties of crops of all kinds, more efficient treatments for the prevention of smuts and blights, new sprays and dusts for insect control, new fertilizers and new methods of application. A very few years ago hybrid corn was introduced, but already it has revolutionized our practices in corn production and improvement.

In Wisconsin the first artificial insemination association for breeding dairy cattle was organized in 1939. Only four years later in the same state 10 associations employed 30 veterinarians to carry the services of 100 outstanding bulls to 45,000 cows, an average of 450 cows per bull. At the same time have come startling discoveries in the field of nutrition, in disease and parasite control, and even age-old convictions on the kind of barns needed for dairy cattle have been conclusively disproven by recent experimentation. Many new discoveries merely augment or refine methods already in use by good farmers, but others flatly contradict present beliefs and methods and call for a total change in procedure.

Are we teaching these newest methods? When an assignment has been developed on some vital production problem do our boys turn to modern, up-to-date texts on our shelves to find the answers, or must they seek their solution in time-worn authorities of World War I vintage? To solve their problems are we bringing them the science of 1943 or are they accepting the teachings that were current 25 years ago?

Library Should Be Culled

During the last five years I have made a point of checking over the agricultural reference library in the departments I have visited. I have been appalled at the number of outmoded and obsolete texts still in use. With a small number of exceptions I believe that texts on production problems in either crops or livestock that are over 15 years old are so obsolete as to be completely useless in teaching modern agriculture. In scores of departments the instructor agreed with me that most books copyrighted earlier than 1925 should be discarded. On that arbitrary basis we sorted the books. In nearly every department we picked out from 40 to 75 such books. In a dozen libraries the yield was more than 100 obsolete texts. An all-time record for museum pieces was set by one of the oldest departments in the state. Its library surrendered 349 books that were written earlier than 1925. We found a dozen books written in the 1890's, and more than 100 that predated 1912.

Such books are not only useless in teaching agriculture, they are positively dangerous. A boy usually has a sublime faith in anything he finds in a text book. He does not stop to inquire as to the authority of the author or the year in which the statement was made. In old books are found many recommendations that subsequent investigations have proven to be in error, or at best to be less efficient than current recommendations. For yet another reason shelves filled with sets of old and useless books are a handicap. Even tho they are never used, they fill the shelves. A principal or school board member visiting the agricultural room does not appreciate that half or more of the books in sight are useless and is apt to answer a request for new and modern texts with the curt question, "Why do you want more books? You have more books now than any other department in the schools."

A library is like a flock of poultry. It needs frequent culling.

When did you last cull yours?

Supervised Practice

C. L. ANGERER

Home Farming Programs

WILLARD E. THOMEN, Connecticut

AS TEACHERS of vocational agriculture, we are interested in *selling* our pupils the idea of a well-balanced, long-time farming program. There seems to be a few of us that are either satisfied with having our boys carry out small, unrelated projects or else we have not yet discovered how to sell the idea of a long-time home-farming program to the pupils. Whichever the case may be, the results are the same: some of the pupils will carry a project of little value either from an educational or an economic point of view. These are often carried out as a *must* rather than as a *want*. Even when the teacher is conscientious, there is often the feeling of failure in establishing the number of good long-time farming programs he desires.

After nine years of experience with ways and means of selling the *well-balanced, long-time, home-farming program idea* to my boys, I decided to try out an idea I received while working with a teacher trainee at Derby Academy, Derby, Vermont. It was in September, 1941, and I was then teaching at the Upper Freehold Township High School at Allentown, New Jersey. I discussed the plan with my assistant, Mr. Swen Gilberg, and together we presented the plan to our respective classes.

Planning Co-operatively

Up until that time, I had been very dissatisfied with my way of grading the pupils for their work in their directed or supervised farming programs; so I decided the first step was to put these programs on a basis whereby an instructor could have some definite way of grading them fairly. The reason for this was that whether we like it or not, high-school boys still work for an immediate return more than they do for some vague reward in the nature of a higher standard of living some day in the distant future. If I succeeded in this first step, I reasoned, the boys would be more receptive to the next step, and really important one, of planning and then carrying out a good, long-time program.

To place the grading on a basis fair to all, Mr. Gilberg and I asked the boys in our classes to co-operate in setting up a "yard stick" in the form of a point system. Being able to set up their own standards by which to be graded immediately captured the interests of the groups. There was considerable discussion on just what points should be given for and the amounts to give. In many cases it was necessary to direct the pupils' thinking towards cutting down on the requirements being set up, for in many instances they become over enthusiastic in their planning, and set the goals too high.

We took about three days for this discussion and planning, after which the final votes on the plan were taken. It was further voted that any pupil, in order to pass his year's work in vocational agriculture, must earn at least 1,000 points, and that the grade received on this part of the work should constitute one third of the year's final mark. (No grades are given in the school for vocational agriculture until the final reports for the home-farming programs are in and summarized. In the case of seniors, a pupil goes thru the graduation exercises with his classmates but does not receive a diploma until his program reports are summarized and in.)

Table 1 shows the scope of the minimum projects acceptable each year for any given enterprise as worked out by the boys in the four classes. The number of points to be granted for each unit is listed in parenthesis under each of the respective column headings. If a pupil carries a unit larger than the minimum set for the number of years he has been enrolled in the course, his points are prorated accordingly. Each boy was urged to carry out a major, a contributory, a supplementary, and an improvement program each year, as well as build some article in the shop. It will be noted from Table I the minimum scope was increased for each year a pupil was enrolled.

Table I

Program	Year	Major (400)	Supplementary (240)	Contributory (200)	Improvement (200)	Farm Experience (400)
A. Pullets (Day old chicks)	1	*Sexed* 100 *Unsexed* 100	100			
	2	150 150	100	Same as major	Records on same number as for major	500 hours
	3	200 250	100			
	4	250 500	100			
B. Broilers	1	250	100			
	2	500	200			
	3	750	200			
	4	1,000	200			
C. Milk Production	1	1 cow		1 calf	Improvement project to be approved by teacher.	
	2	1 cow		1 calf		
	3	2 cows		2 calves		
	4	2 cows		2 calves		
D. Calf	1	1 calf	1			
	2	1 yearling	1			
	3	1 calf, 1 cow	1			
	4	1 cow, 1 calf, 1 yearling	1			
E. Pig	1	2 pigs or one sow	2	1 pig or 2 pigs		
	2	1 sow and 5 pigs	2	3 pigs or 5 pigs		
	3	3 sows and 12 pigs	2	5 pigs or 8 pigs		
	4	5 sows and 20 pigs or 8 sows and 30 pigs	2	8 pigs or 12 pigs		
F. Turkeys	1	25 turkeys	25	1 tom and 6 hens		
	2	50 turkeys	35	2 toms and 12 hens		
	3	100 turkeys	50	3 toms and 18 hens		
	4	150 turkeys	50	4 toms and 24 hens		
G. Laying Hens	1	100 (Day old chicks)	50			
	2	50 hens	100			
	3	100 hens	100			
	4	250 hens	100			
H. Potatoes	1	1 acre	1 acre		Records on same number of acres as under major	
	2	3 acres	1 acre			
	3	6 acres	1 acre			
	4	10 acres	1 acre			
I. Tomatoes Squash Sweet Corn	1	3 A. canhouse or ½ A. market	½ acre			
	2	5 A. canhouse or 1 A. market	½ acre			
	3	7 A. canhouse or 1½ A. market	½ acre			
	4	10 A. canhouse or 2 A. market	½ acre			
J. Strawberries	1	0 acre and ½ A. prepare	1/16 acre			
	2	½ acre and ½ A. start	1/16 acre			
	3	1 acre and ½ A. start	⅛ acre			
	4	1½ acre and 1 A. start	⅛ acre			
K. Field Crops	1	Size depends on crop and is to be approved by instructor	1 acre			
	2		1 acre			

An example of how the program is graded may be seen from the following case: A boy in his sophomore year starts his program with 50 ready-to-lay pullets which he has selected from his freshman baby-chick project. He raises 2 acres of hybrid field corn, as one contributory, and purchases 150 sexed pullets for a second contributory enterprise; he plants one acre of potatoes for his supplementary program; thins out one acre of wood lot, and keeps a New Jersey Farm Account Book on his father's business for his improvement programs. In the school shop he constructs and paints two range feeders and a range shelter to be used in the expanding of his contributory program. His points then would be as follows:

Major enterprise	400 points
2 contributory enterprises	400 "
1 supplementary enterprise	240 "
2 improvement enterprises	400 "
Shop projects	260 "
Subtotal	1,700 "

In addition to the above, he may earn 400 points by keeping his records neat and accurate and up-to-date, and 300 points for selecting a program in keeping with the opportunities offered on his home farm. This then would make possible a total of 2,400 points for this boy.

It was further voted that a score of 3,000 points should equal a grade of 100 percent. If then, 1,000 points equals 65 percent which was the passing grade for the school, this boy would therefore have a grade of 89.5 percent for his home farm program work, and this in turn would equal one-third of final grade for the year.

As to the effectiveness of this plan, I refer you to Table II. It will be noted that the income from directed and supervised practice, for the first year this plan went into effect, was nearly one-third of the entire earned and labor incomes for the entire seven years.

F.F.A. Develops Mutual Insurance Program

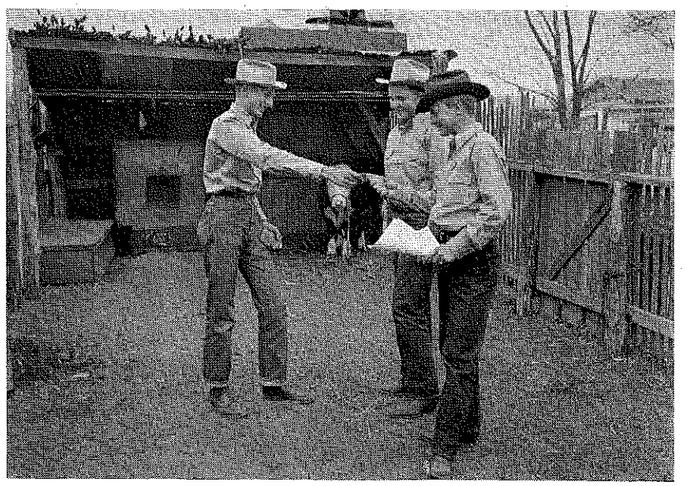
H. M. HOWELL, Teacher, Midland, Texas

IN SEPTEMBER, 1941, when we first organized the Midland F.F.A. Chapter in Midland High School, we found that one of the big problems the boys were confronted with was protection on the animals they were securing for their supervised farming programs. Several of the boys were borrowing money to finance their projects from the Midland Production Credit Association, and they were worrying about having to pay that money back if their animals died.

Need for Coverage

Three or four of the boys came to me with their problem and asked for a suggestion as to how they could protect the money they had invested. I suggested they secure all the information they could on livestock insurance from local sources so they could have a basis on which to work. This information was very discouraging as they found it would cost them too much to protect their investment with a regular insurance company. They were not satisfied and felt they could work out a cheaper plan that would give them the desired protection. They finally decided on a mutual plan whereby all the boys shared equally the expense on the death of an animal. Two of the boys lost lambs and it cost each of the 24 boys 50 cents to take care of the loss. However, we found it hard to get all of the boys to pay the amount due at the death of the animal. In fact some never did pay and that made the cost higher on those who did pay.

We still felt that a better plan could be worked out so a group of six boys got together in the fall of 1942 to work out a more desirable plan of livestock protection. They decided to form a company with $200 capital. This $200 was borrowed at a local bank until such time as a reserve could be built up from the premiums on the animals that were insured.



All seem to be happy after considerable controversy, over the value of the steer in the background, between J. V. Stokes III, left, owner of the animal, and Jerry Bohannon, center, claims agent (and appraiser) of the Midland Future Farmers Protective Association. At right Bill Ponder, secretary-treasurer, accepts payment of premium from the new member.

Table II

The correct figures for the income from directed and supervised practice for the year ending 1942–1943 are as follows:

1. Labor income from productive enterprise projects only	$ 55.46
2. Labor income from productive enterprise projects plus other supervised practice	7,578.17
	1,708.56
3. Improvement projects	No income
4. Supplementary supervised practice only	No income
5. Two or more forms of other supervised practice	1,123.53
6. Placement	999.68
Total	$11,465.40

Similar figures for the seven years since the department was established are:

1. Labor income from productive enterprise projects only	$10,843.03
2. Labor income from productive enterprise projects plus other supervised practice	16,653.38
	2,884.03
3. Supplementary supervised practice only	446.35
4. Two or more forms of ~~other~~ supervised practice only	1,487.69
5. Improvement projects	No income
6. Placement for farm experience	1,499.02

Mutual Plan Developed

The following by-laws were worked out to govern the association:

I. Membership shall be limited to Midland Future Farmers. Membership shall include a payment of 25 cents to care for necessary business of the association.

II. Protection shall be written on the purchase price of an animal or protection shall be determined by the following table if raised by a Future Farmer

Beef Calves	
4 months old	$40
6 months old	50
12 months old	60
18 months old	75
Lambs	
6 months old	$ 6
8 months old	8
12 months old	12

Farmer Classes

E. R. ALEXANDER — W. H. MARTIN

Getting Farmers to Think

A. C. SPENCER, Teacher, Trinity, Texas

ACCORDING to Dr. Lancelot, "There is apparently but one way to lead students—or others, for that matter—to think. It is give them something to think about."

Too Much Telling

In recent years, there has been a rapid change in the ideas about what constitutes a good adult farming program. In the past, many have held the idea that it was the responsibility of the vocational agriculture teacher to make a thoro survey of his individual community, determine the problems, decide upon proper remedies for the problems, and then launch a vigorous program to get the farmers to put into practice the remedies he decided were necessary. Altho results in some instances have been a marked improvement of conditions in the community, a large number of cases have been entirely unsuccessful. The principal error in this approach seems to have been that it ignored the capabilities and viewpoints of the farmers themselves. This being true, the farmers entered into the program only half-heartedly and without thinking it thru themselves, and failed to get a true understanding of what was to be done.

After careful thought along this line, I have come to several conclusions:

1. In the past, and at present, so-called agricultural leaders have been entirely too prone to tell the farmer how he should run his business.
2. Lasting, worth-while farm and rural improvements are almost always the result of farmer thinking.
3. The place of the vocational agriculture teacher is to promote farmer thinking along lines of improvement, encourage him to make his own decisions, and lend educational assistance to him in putting his decisions into practice.

Directing, Not Leading

Taking conclusion number one, let us see how much of the farmer's business has really been his own. In the past 12 years, the farmer has received an allotment from AAA as to the number of acres of the basic crops that he could grow. If he had borrowed money from the bank, Farm Security or Production Credit, he was given strong suggestions as to how much livestock and other crops he should grow and how he should handle his financial business. When he actually started to produce the crops, he had an over-zealous county agent, vocational agriculture teacher, or farm security supervisor to tell him how to plant, cultivate, harvest, and market his crop. With all this free help, there has been very little opportunity for farmer thinking. The business principle that it is easier and more efficient for one man to applies to farming. Each oral supporter has a pet idea as to what the farmer ought to do. If the farmer follows all his advisors, he "flutters in all directions and flies in none." Even if the suggestions made to the farmer were good and well correlated, he will not use them with the energy and enthusiasm he would have, had he thought or been led to think of them himself.

The above statements are made not necessarily in criticism of the mentioned services and agencies, but to point out that perhaps more attention should be paid to the development of farm people and less to getting the farmer to do an individual job. Henry Ford has said: "It is better to put 10 men to work than to do the work of 10 men." This statement applies fully to agricultural workers. It is far better to get 10 farmers to solve their problems than to solve the problems of 10 farmers.

Farmer Conclusions Better

The second conclusion that lasting, worth-while, farm improvements usually are a result of farmer thinking is based on human nature. It is a natural tendency for people to want to do well. To do well a farmer usually must follow a well-planned system of farming with possibilities and limitations carefully weighed and correct decisions made. To make correct decisions embodies the understanding of the problem involved. To understand the problems requires considerable thinking. We have then the fundamental basis for doing well when we have a thinking farmer.

Teachers Place

The third conclusion, that the place of the agricultural teacher is to foster and promote rural farmer thinking and farmer decisions and lend educational assistance, involves a high degree of skill, a constant alertness, and a will to do. In a good many cases, it is much easier to tell a farmer what he ought to do than to get him to think it out himself. What a person or farmer can do depends upon his own individual home conditions, such as financial conditions, health, personal skills, and countless other things. When an outsider makes a decision for the farmer, the outsider is likely to ignore part or all of these conditions.

Keeping all the aforesaid statements in mind in 1943–44, I shall endeavor to develop the habit of thinking in farmers, and thru farmer-thinking accomplish desired individual skills. I shall do this by doing as much or more farm visiting than I have in the past, but instead of visiting for the purpose of doing personal service, I shall visit for the purpose of discussing problems. In the course of conversation, I shall introduce or lead the

Getting Farmers into the Problem

In my community the immediate problem is securing new sources of cash income. I shall suggest that other sections of the state with similar soils, climate, and rainfall have added sweet potatoes, Irish potatoes, and tomatoes to their farming enterprises and have been having marked success. We shall continue along this line and discuss our own possibilities to do this. If the farmer's opinion is favorable, I shall make the statement that I think we can grow these crops and, that if enough farmers will do it, we can establish a good market in our community. I shall also state that I think enough farmers would be interested, if he will help me acquaint them with the possibilities. After visiting and enlisting the aid of several key farmers, I shall suggest that we might have a meeting to discuss the advisability of such a program.

Leading to Think

At the meeting I will present the problem briefly. Perhaps I will say, "I have been talking with a number of you men who seem to think that we can successfully add sweet potatoes, Irish potatoes, and tomatoes to our crop program and make more money. What do you think?" The key farmers that have been contacted can be depended upon to start discussion and express opinions which will lead others to join in. Thru well-placed questions, the leader can keep the discussion in line with the problem. If discussion seems to lag before all possibilities have been considered, the leader can employ one of several devices. Namely:

1. Ask leading questions.
2. Raise controversial questions.
3. Call upon experienced farmers to voice themselves pro and con.
4. Make some suggestions for approval or rejection.
5. Ask the group to analyze suggestions already made.

By the use of one or all of these devices, the possibilities of the problem can be exhausted and a decision can be reached. It may be that additional information is needed. In this case, a committee can be appointed to make a trip or otherwise procure the information. Then another meeting can be held before a decision is reached.

In the above-outlined personal contacts and meeting, I shall attempt, in the words of Henry Ross of Texas A. & M. College, to "serve as a catalytic agent in directing farmers to think thru problems and to make decisions, without making any for them."

The above-mentioned technique, if skillfully used, will apply to any program, The results of the use of this method will be cumulative and in the matter of a few years, the farmers will be in the habit of thinking thru and solving their problems together without the extensive

Developing a Community War Program

W. C. JAMES, Assistant Supervisor, Columbia, S. C.

BLANEY farmers are snapping to attention at Uncle Sam's call for food. An about face from old methods of production and superstitions concerning new phases of farming is taking place.

As a concrete example of this, Mr. C. E. Young, agriculture teacher, states that farmers have in the last two years increased production in spite of shortages of labor and machinery. The most notable increase in essential food items has been made in poultry production. Since the first of last September, farmers have grown-out, or are in the process of growing-out, 15,200 chickens for market. Approximately 1,200 hens are producing eggs for our nation's food basket. Farmers have set as a goal in poultry production for 1943, the production of 35,000 chickens for market.

Future Farmers of the Blaney Chapter share an equal part in the achievement in the production of poultry as they have, since September 1, produced 8,500 chickens for the market.

Poultry Dressing Plant

Realizing the need for a unit to enable farmers to market chickens successfully, and to realize more profit from poultry production, the Blaney Chapter of Future Farmers took as one of its objectives the construction of a poultry dressing plant. Farmers are now reaping the benefits of this unit. Thousands of chickens have been dressed and marketed thru this unit. Not only does this plant increase profits of poultry production, it saves hundreds of man-hours of labor in a time when labor is so scarce. The Blaney Future Farmers are now concerned with starting a hatchery at school for community use. It believes that to be successful with poultry a rounded-out program must be established.

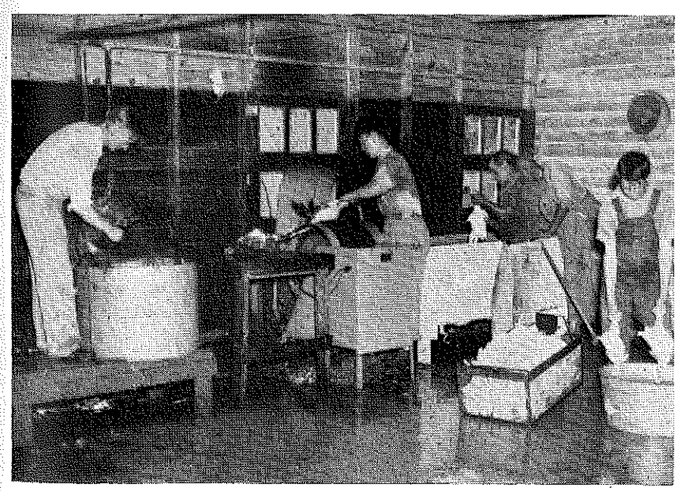
Altho chickens are "spot lighted" at present, they are closely rivaled by hogs and cows. Much work has been done to impress upon growers the importance of good pastures and the need for producing

Broad Educational Program

Here again young men of the community are serving an important job in the nation's war effort. Acting as reporters and messengers, they have helped get hundreds of animals vaccinated against diseases. These boys help in many ways to pass useful information from their classes to farmers in the community. Practically every school day, several young students come up with some questions concerning farming operations on their home farms. They are "Active Agents" for their community and country.

In the present fiscal year, classes in Rural War Production training have been conducted thru the agricultural department; classes such as metal work, farm machinery repair, increasing poultry production, and the production and conservation of fruits and vegetables have been taught. Young men and farmers have received much training in these classes. They are taught how to repair farm machinery, do metal working jobs, and use new methods of production for animals and vegetable crops. As essential industries have taken critical materials from the farms, the course in farm machinery repair has taught the farmer many lessons in conservation, repairing, and maintaining the iron plow, harrow, or mowing machine that once was sold as junk to scrap dealers.

With all indications pointing to a long war, farmers are realizing that they must keep their pantry shelves full of nutritious home-grown and processed food. The school and the State Department of Vocational Education have seen the need for a successful unit to process food for these families. A well-arranged and well-



F.F.A. boys help feed the Army

low state of productivity, farmers are awakening to the fact that a proper balance between livestock production and production of food and feed is essential in establishing a "live-at-home" program and a soil improvement program.

school grounds thru the efforts of these two departments. Farm families are invited and urged to use this cannery. The cannery is off to a good start this season, having already canned 2,500 quarts of food.

Not only does this cannery serve individual farmers, but also the school in its school lunch program. One hundred and ten bushels of snap beans have been canned this season for the school lunch. It is anticipated that 20,000 quarts of food will be processed in the school cannery this year.

Possibly one of the most modern trends in the agricultural development in the community is that of the farmers' realizing that they must co-operate to achieve any worth-while objective. The farmers of Blaney are pooling their produce to secure better markets and prices. They also pull together when buying so as to get cheaper rates and better goods.

Blaney Farmers are realizing their place in a "World at War" and are going about the business of farming in a business-like way.

Learning by Doing Pays

M. C. GAAR, Teacher Education, Morgantown, West Virginia

ON APRIL 23, 1943 the Bruceton Mills F.F.A. chapter held its annual father and son banquet and made the following report of its 27 vocational agricultural students' supervised farming programs. Bruceton Mills is a typical small rural American high school and community. The farmers are progressive and maintain a close working relationship with the high school and its agricultural program. These high-school boys as well as their dads are making special effort to reach maximum production in order to feed our home people and our allies.

As indicated by the following report, Mr. B. L. Bible, the vocational agricultural teacher, comes very close to achieving the aim of vocational education in agriculture: *To train present and prospective farmers for proficiency in farming.*

The supervised practice programs of 1941-42 were as follows:

The supervised farm practice program which each F.F.A. member conducts gives him an opportunity to carry out in practice what is learned in the classroom. We are learning thru our vast national defense program that work is what actually keeps our country advancing.

The year 1941-42 was a good year for agriculture. Twenty-seven members carried 141 enterprises, averaging 5.18 enterprises each. The average labor income per pupil was $396.95 or an increase of $106.42 per pupil over the previous year. All boys carried continuation enterprises and an average of 2.9 improvement jobs per pupil. At least 5.2 skills were developed by each member. Corn ranked first in returns, laying hens second, and baby chicks third.

Agricultural Production is the first in order, the strongest in necessity, and the highest in usefulness, in this whole system of acquisition. The other branches stand upon it, are sustained by it, and without it could not exist. (Address before the New York Agricultural Society,

Farm Mechanics

L. B. POLLOM

Scheduling Farm Shop

J. W. MYERS, Teacher, Turbeville, Virginia

A FARM-MECHANICS class to operate successfully must have a schedule to meet the needs of the all-day, part-time, and adult classes. There are many important phases of the farm-mechanics program, but the high-school schedule is a very important factor for the efficient teaching of the classes.

An average of 50 boys are enrolled in vocational agriculture in the Turbeville High School each year. Formerly the high-school schedule was operated on 45 minute class periods. Double periods were required for vocational agriculture. Farm mechanics was taught for a period of six or eight weeks in the winter months. Approximately 25 boys were enrolled in each shop section or class.

Following a series of conferences of a small group of teachers of vocational agriculture, the schedule in Table I was worked out and has been in operation for three school sessions:

As shown by the schedule each boy is required to take five hours of class work each week and two hours of farm mechanics. The advantages of this schedule are as follows:

1. No more than 10 boys are enrolled in each section of farm mechanics.
2. Teacher has more opportunity for supervising each boy's work.
3. Each boy has an opportunity to work out a shop schedule.
4. The boys and community are made shop conscious thruout the year.
5. Boys repair jobs from the farm as they occur.
6. Shop is available one afternoon a week for adult and part-time class members.
7. Certain boys have the opportunity to devote more than two hours each week to farm mechanics if they desire.

Table I—Schedule of Classes

Period	Monday	Tuesday	Wednesday	Thursday	Friday
9:00 10:00	Ag. I	Ag. I	Ag. I	Ag. I	Ag. I
10:00 11:00	Ag. III & IV	Ag. III & IV	Ag. III & IV	Ag. III & IV	Ag. III & IV
11:00	Ag. II	Ag. II	Ag. II	Ag. II	Ag. II
12:00 12:30	LUNCH PERIOD				
12:30 1:30	Shop II	Shop II	Shop III	Shop III	Shop open for adults and part-time members
1:30 2:30	Shop IV	Shop IV	Shop I	Shop I	

Place of the Shop in the Agricultural Program

H. O. HENDERSON, Teacher, Navasota, Texas

HOW should shop work be promoted in vocational agriculture departments where shop and equipment is available? The answer to this question depends a lot on the community, type of equipment used, and the number of commercial shops available for farm equipment repair.

Most schools that have obtained equipment thru the OSYA Rural War Training Program have shown that there was a definite need for such before the purchase of the equipment was approved. With this in mind, one should carefully then proceed to make the shop training program fullfill its purposes.

I have found that farm boys and farmers like to work together. They should be allowed to do emergency repair work at any time, and in most cases should be assisted by the vocational agriculture teacher or the one in charge of the shop.

The vocational agriculture teacher should consider shop work as a definite part of his agriculture program.

Due to the shortage of implements and many other items needed around the farm, it is highly important to keep the shop open at all times. Teach farm boys and farmers to save and take care of items that are likely to be hard to replace. This is a good practice any time, but especially now. If boys can be taught how to handle tools, equipment, and materials in such a way as to extend their performance, it will help in the war effort, and be the

Editorial Comment

(Continued from page 123)

could be taught how to evaluate their teaching and to work on its improvement in a truly professional manner?

Teachers of vocational agriculture would probably be the first to admit that they have not trained these special teachers as they should be trained. They may have found it physically impossible in some cases due to the numbers involved and the other responsibilities carried because of the sheer size of the program. They may have had insufficient training or experience themselves.

Adjustment of Teacher-Training Needed

It has been clear to this writer for some time that teacher-trainers should give more assistance than they have given in the past to these special teachers and to the regular teacher of vocational agriculture in helping him to train the special teachers of adult classes under his supervision. Teacher-trainers have been relieved of most pre-service, resident teaching due to reduced enrollments, and hence have time to do more in-service training.

Some progress can be reported. In one state members of the teacher-education staff have developed charts and other teaching aids for use in Rural War Production Worker Classes. In another state adult methods clinics have been held. In these clinics the teacher-trainer and several teachers of vocational agriculture have observed a special teacher of an adult class. Following the class the methods used by this special teacher have been discussed, as well as ways of improving the instruction of special teachers then being supervised by the regular teachers present. In many states conferences on a district or state basis have dealt with methods of supervision.

In one state plans are being laid for a rather systematic approach to the training of these special teachers. A co-operative plan has been developed in which a short series of training meetings for special teachers would be held in the local community. In some cases these might be drawn from two or three adjacent communities. While these meetings would be under the direction of the regular teacher of vocational agriculture, the plan calls for co-operation by the teacher-trainer to the extent of giving training in conference procedure, in demonstration teaching, and in discussing course organization and planning. Altho one or more meetings would be held before adult classes start, some meetings could run concurrently with the adult classes.

There are probably other and more effective ways in which this in-service training can be given. But we must recognize it for what it is—a teacher-training responsibility. It is a challenging responsibility. Let's not muff it, but study

How's Your Conscience?

WAYNE G. TWOMBLY, Teacher, Vermont

YOUR conscience should be giving you less trouble. To my great surprise I have discovered that I have had one for years, without realizing what was causing that peculiar cranial disturbance until I suddenly noticed it had very nearly disappeared. For the first time in my six years of teaching I can face myself and say without erasing twenty fingers and toes, "You are really contributing something; in fact, you are almost doing your best." Of course I had to be pushed into it, but when I finally got in deep enough so that I had no time to crab about how horribly I was overworked, under-appreciated, and under-paid, I began to feel a sneaking satisfaction that made me almost glad of that shove.

Pressured Into Program

Six years ago only two pressures brought about a single evening or part-time class in the majority of the departments, and both these pressures were of the "push" variety from behind; namely the State Office and the possibility of easy money. Today one of these pressures has largely subsided, one remains, as it should, but the main pressure in the field now is of the "pull" variety; it is an unquestionable demand from the farmers themselves for help and guidance in meeting new problems resulting from war conditions. I know of one county agent who remarked that "the government has drafted agriculture teachers now to visit farmers and help out with their problems;" I am conceited enough to believe that in many of our communities now it is the farmers themselves who have done the drafting, after they have had a taste of what a *good* war production course in dairy or poultry production or farm machinery repair can do for them.

Sound Program Developed

We have completed one OSYA course in Brandon and now have five in operation, each meeting two nights weekly, in Brandon, Pittsford, Orwell, and Shoreham. The completed course in increasing milk production was organized by direct effort and contact visits, urging the farmers to come. Thirty of them did, and kept coming. Every one of the five courses following have been demand courses, requiring no work in recruiting and urging on the supervisor's part whatsoever. Perhaps all of this sounds to some readers suspiciously like bragging. Let me state here and now that my whole point is that if I could do this much, any teacher in the state where an equal number of normally interested farmers can be found could equal or better this record, as many of them have. No teacher has been more "backward about coming forward" with a good adult program than I. I disliked intensely starting my first evening class and part-time class. I disliked the OSY type of course so intensely that I never did have one, under cover of excuses whose validity now seems a bit questionable. The definite fields and activities in which we can and should make real contributions to the war effort are clear-cut. We all realize what they

on them, let us itemize some of the more important ones here:

1. *The Rural War Production Training Program.*
   We must organize and supervise as many courses as demand and facilities make possible, securing the best instructors available, including ourselves if we happen to be best qualified.
2. *Salvage Drive*
   We must co-operate with local salvage committees and other organizations, taking the lead, if necessary, in cleaning up our farm scrap metal and rubber. This must be a continuous effort and is amply rewarded in cold cash for our F.F.A. chapter treasuries and greatly increased public appreciation of our chapter and its work.
3. *Victory Gardens*
   It must be our responsibility to give all of the help, instruction, and supervision possible to local gardeners this year. This will involve close co-operation with the Extension Service and local garden clubs, Rotary clubs and Granges in some communities, while in others the bulk of the work and responsibility will fall on the agriculture teacher alone. We must co-operate with teachers of home economics in operating community canning and food preservation centers wherever they are deemed practical and necessary.
4. *Farm Labor Situation*
   We must do all in our power to place our all-day boys on farms where they are most needed, in most cases their own home farm. It is our responsibility to help and train village boys for farm work, when there are some who are willing to do their bit by taking farm jobs.
5. *Supervised Farming*
   We must remember that it is the worst imaginable time to let other activities distract so much of our attention from our all-day boys' farming programs that they are allowed to slump. Now is the time for them to make a real contribution to our nation's food supply and increase their own labor incomes simultaneously.
6. *All-Day Class Instruction*
   We must tear up our cut and dried courses of study which we made out five years ago and give these boys stuff which they can put into immediate use in this emergency. Now is the time, if ever, for farm machinery repair, tool fitting, and the making of labor saving devices such as grain and ensilage trucks in shop, and for more attention to farm management and means of increasing production in the classroom study.
7. *The F.F.A. Chapter*
   Conditions have never created an opportunity like this to make the public aware of our existence as a working community organization, and to aid in getting good seed into the community, scrap metal out of the community, and "cash metal" into the chapter treasury.
8. *Community Defense Activities*
   Any time that is still available can be well spent in co-operating by serving

Vermont State Guard, and as a spotter in the Aircraft Warning Service.

My closing advice would be to read thru the above eight points just before retiring at night. Give yourself an honest appraisal from the standpoint of each, and for each activity in which you truthfully feel that you are doing all you can, score yourself 10 points. If your score is 75 or better, go to bed, relax, and have a sound peaceful sleep. If your score stands at 50 or below, toss off a small capsule of thinking before going to sleep. If you find your score to be 25 or under, not much hope can be held for recovery; the condition has probably become chronic, and only continual hypos of self-fooling excuses can ease the condition.

F.F.A. Develops Insurance Plan

(Continued from page 129)

Hogs
Barrows—8 wks. . . . . $ 6
Gilts—8 wks. 10

Dairy cattle value was to be determined by claims agent and owner. At the end of one year, the calf may be protected for 150 percent of the purchase price.

III. Protection can be canceled by a 10 days notice given by claims agent where there is evidence of neglect of animal, and the unused portion of premium money shall be returned.

IV. In case of sickness or injury the claims agent must be called, and a graduate veterinarian employed at owner's expense when deemed necessary by claims agent.

V. Death claims must be submitted to the Association, and a statement by claims agent shall be considered proof of loss.

VI. Animals are protected against loss by injury, death, or theft.

VII. The directors of the Association are to secure a capital of $200, and the capital shall be maintained at this figure except in case of payment of a claim.

VIII. Calves must be vaccinated for blackleg, within 10 days of application, or same will be canceled.

IX. Premiums shall be determined on animal by multiplying the value by six percent.

X. Changes in the by-laws may be made by a three-quarters vote of members of the Association when a quorum of 75 percent of the members are present.

There is a membership of 15 boys in the Association at the present time with several animals insured. We found that fewer boys insure under this plan, but they are better protected. The length of coverage is determined by the kind of project. Most of the animals that have been insured thus far were animals on feed for market. We feel that this plan will be very good if more of the boys become members and insure their animals. Time will prove or disprove the soundness of such an activity.

The boys elected three officers: President, R. C. Vest, Jr., Secretary-Treasurer, Bill Ponder, Claims Agent, Jerry Bohannon. The president was elected with two important qualifications in mind: his interest and his ability. The secretary-treasurer must be honest and efficient, and the claims agent must be able to put a fair estimate on an animal and stay with his estimate. He must know

Studies and Investigations

C. S. ANDERSON

Determining the Needs for Vocational Agriculture Departments

E. J. JOHNSON, Regional Agent,
U. S. Office of Education

E. J. Johnson

SLIGHTLY over a quarter of a century ago, the Federal Government, after careful study, found it essential to stimulate vocational education in the states on a co-operative but conditional basis. As a result of this study, Congress passed the Smith-Hughes Act in 1917 providing for the co-operation of the Federal Government with the states in the promotion of vocational education in the public secondary schools.

The need for further development of such education to train persons for useful employment has been recognized subsequently by Congress as evidenced by the passage from time to time of supplementary acts. Since the passage of the Smith-Hughes Act, instruction in vocational agriculture has been provided to our farm population in a practical manner and on a rapidly growing basis. This growth, which was consistently maintained until the war brought about an acute shortage of vocational agriculture teachers, is sufficient evidence of the popularity and need for this type of training in the realm of education.

Distribution of Departments

It would be educationally and economically sound if departments of vocational agriculture were equitably distributed in all of the states according to the farm population so that youth who intend to become farmers may have a satisfactory chance to secure training in agriculture. With this thought in mind, a study was made for the school year 1941–42 to determine the number of counties in the United States that have departments of vocational agriculture. Since this study was made prior to the time when drastic losses of vocational agriculture teachers occurred, it reflects the situation as it existed under normal conditions.

Table 1 shows the summary of this study by regions. Of the 3,096 counties in the entire country, which include 26 independent cities, 2,610 have departments of vocational agriculture in their secondary schools. Twenty-two counties have departments for Negroes only. Departments of vocational agriculture have been established in over five-sixths of the 3,096 counties. The percentages of counties with vocational agriculture departments ranges by regions from 67.6 percent in Pacific to 88.6 percent in the Southern, and by states from 50.8 percent in Colorado to 100 percent in Delaware, Rhode Island, and South Carolina.

The size of county, density of population, and occupations of inhabitants within a county, varies greatly by states. It would not be fair, therefore, to compare any particular state or region with another state or region, on the basis of the percentage of counties having departments of vocational agriculture.

The small number and the low percentage of vocational agriculture departments in the Pacific region as compared with other regions is accounted for largely by the sparsity of population in the Pacific region. This factor, moreover, is not offset by the fact that the Pacific region states have excellent roads and favorable climatic conditions that permit the convenient consolidation of schools and the transportation of pupils over long distances.

Table II

Size of Communities[1] in the United States in Which Departments of Vocational Agriculture Are Located, by Regions, 1941-42

Region	Number of voc. ag. depts.	Number of departments by size of community (population)									
		0–999		1000–2499		2500–4999		5000–9999		10,000	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Total	7,991	5,009	62.7	1,641	20.5	671	8.4	382	4.8	288	3.6
N. Atl.	1,437	932	64.9	269	18.7	107	7.4	69	4.8	60	4.2
N. Cent.	2,528	1,440	57.0	618	24.4	232	9.2	144	5.7	94	3.7
Pacific	734	375	51.1	172	23.4	90	12.3	46	6.3	51	6.9
Southern	3,292	2,262	68.7	582	17.7	242	7.4	123	3.7	83	2.5

[1] Community refers to the village, town, or city where department is located.

Table III

Summary Including Both White and Negro Departments

United States	Number of voc. ag. depts.	Number of departments by size of community (population)									
		0–999		1000–2499		2500–4999		5000–9999		10,000	
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Grand Total	8,994	5,595	62.2	1,828	20.3	792	8.8	441	4.9	338	3.8
White	7,991	5,009	62.7	1,641	20.5	671	8.4	382	4.8	288	3.6
Negro	1,003	586	58.4	187	18.6	121	12.1	59	5.9	50	5.0

Note: White departments, 88.8 percent of total; Negro departments, 11.2 percent. These figures are significant in view of the fact that Negroes comprise approximately 10.5 percent of total population.
Puerto Rico with 115 departments and Hawaii with 46 departments not included in this study.
A few departments which are only supervised are not included.
Bureau of Census, 1940 population figures used to determine community size.
Location of departments determined from 1941-42 releases from State Departments of Vocational Education.

Table

Number of Counties in the United States With Departments of Vocational Agriculture by Regions, 1941–42

Region	Number of counties	Counties having departments of vocational agriculture					
		White and Negro		For White		For Negro	
		Number	Percent	Number	Percent	Number	Percent
TOTAL	3,096[1]	2,610[2]	84.3	2,588	83.6	538	17.4
North Atlantic	387	337	87.1	335	86.5	24	6.2
North Central	1,089	924	84.8	924	84.8	15	1.4
Pacific[3]	410	277	67.6	277	67.6	—	—
Southern	1,210	1,072	88.6	1,052	86.9	499	41.2

[1] Includes 3,070 counties, St. Louis City, Baltimore City, 24 independent cities in Virginia, but not the District of Columbia and Yellowstone National Park which are included by the Bureau of the Census. Hawaii and

Southern Region Leads

As is to be expected, the Southern region, because of its more densely populated rural areas, leads in the number of counties having vocational agriculture departments. One thousand and seventy-two counties out of a total of 1,210 have vocational agriculture departments. Texas stands first with vocational agriculture departments in 215 of its 254 counties. Delaware has vocational agriculture

In the 2,610 counties in the United States which have vocational agriculture departments there are 8,994 of these departments or an average of 3.5 departments in each county.

Need for More Departments

The study reveals that there is a need for departments of vocational agriculture in many areas in which there are no departments at the present time. This need presents a real challenge for sound expansion after the war when it is possible to secure the number of qualified vocational agriculture instructors needed to meet the demands in each state. It is understood, of course, that it would not be wise to establish a vocational agriculture department in every county since some counties are definitely industrial in character and others lack sufficient population to support adequately a desirable type of vocational agriculture department. However, those responsible for the promotion of vocational agriculture should see to it that vocational agriculture departments are established in as many centers as possible where essential assistance can be rendered thru this type of education.

The Agricultural Education Service of the U. S. Office of Education has found that the county is the smallest geographical unit recognized by many other agencies and organizations in carrying on their services. The information developed in this study, therefore, has been of considerable assistance to the Office of Education in co-operating with these agencies and organizations.

The charge is sometimes made that vocational agriculture departments are frequently located in areas which are more urban than rural, and therefore are not serving the groups they are intended to serve.

This charge is refuted, however, by the data contained in tables 2 and 3 which summarizes the results of a recent nation-wide study.

The detailed figures compiled in connection with the study previously referred to, show that the number of vocational agriculture departments in communities of less than 1,000 population varied from 27.5 percent to 93.8 percent in the states, and from 51.1 percent to 68.7 percent by regions. Sixty-two and two-tenths percent of the vocational agriculture departments in the United States as a whole are located in communities of less than 1,000 population. Considered by states the percentage of vocational agriculture departments in communities with populations from 1,000 to 2,499 ranges from 9.5 percent to 43.7 percent, and by regions from 17.7 percent to 24.4 percent. Analyzing the results of the study in another way, it may be stated that 82.5 percent of the vocational agriculture departments in the United States are found in communities of less than 2,500 population. A large number of the high schools serving rural areas are located in communities of 2,500 population or more. This is additional evidence that vocational agriculture is serving those it is meant to serve. Inasmuch as there are 3,200 communities in the United States with a population ranging from 1,000 to 2,500, it goes without saying that many of these communities do not at present have vocational agriculture departments. Particular considerations in communities where the citizens secure practically their entire income from agricultural sources.

Vocational education in agriculture strives to serve farm people as effectively and efficiently as possible. An equitable distribution of departments of vocational agriculture on the basis of farm population is not always possible.

A careful study of the vocational agriculture program in each state would show the desirability of: (1) relocating a few departments with respect to the farm populations they serve; (2) increasing the staff in some vocational agriculture departments; and (3) establishing new departments in communities in which they do not at present exist. Furthermore, such a study, with a knowledge of the enrollment in each department, would reveal also how effectively these departments are reaching those who need training, within the area served.

Summary

1. Eighty-four and three-tenths percent of the counties in the United States have one or more departments of vocational agriculture.
2. The occupations of the residents in some counties do not warrant the establishment of a department of vocational agriculture in these counties. Departments should be located to serve farmers.
3. It is economically unsound to establish departments of vocational agriculture in counties in which the population is limited.
4. In sparsely populated states, such as some of those in the Pacific region where good roads and hence good transportation conditions permit pupils to travel long distances to consolidated schools, fewer departments of vocational agriculture are needed.
5. The percentage of counties with vocational agriculture departments is far less in some states than in others.
6. Many counties in agricultural areas are still without vocational agriculture school facilities for their farm youth and farmers.
7. When there is one or more departments of vocational agriculture in each county, it is possible to correlate more closely the work done in vocational agriculture with that done by other related agencies and organizations.
8. Eighty-two and five-tenths percent of all vocational agriculture departments in the United States are located in communities with a population of less than 2,500 (classified as rural).
9. Many of the departments located in communities with a population of 2,500 or more are better able to serve the rural areas of which they are a part than would be a number of schools located in segments of these areas.
10. Schools in many small communities serving rural areas do not provide the instruction in vocational agriculture needed in these areas.
11. The size of communities having vocational agriculture departments varies greatly by states.
12. Each state should make a careful study of the location of the farms within its boundaries so that it will be able to determine where new departments of vocational agriculture are needed, what departments might appropriately be closed or moved, and in what departments the staffs should be increased or

Fundamentals of Educational Method

(Continued from page 127)

dents of the opportunity and necessity of making their own decisions and plans of action. In fact, of the two essential steps in the performance of any activity having educational value, *i.e.*, (1) the antecedent activity involved in making the necessary decisions and plans, and (2) the subsequent physical carrying out of the plans, the first is of much greater educational significance. Yet, in our teaching, we too often deprive our students of the opportunity to perform fully the first step because it is quicker and easier for us to do it for them.

Summary

To summarize, we can regard our instruction as effective when it produces in the learner those changes in his behavior which we desire to make and when those changes are relatively permanent. All the elements or factors which naturally enter into human behavior must, therefore, be well understood by the teacher and skillfully implemented in his instructional methods. These elements are multitudinous and interrelated in extremely complex patterns. While the essential unitary character of the human organism must ever be recognized, for purposes of analysis and use the various factors may be considered as falling into three main categories: (1) the effective or emotional, (2) the mental or cerebral, and (3) the physical or organic.

This implies that the teacher must so set the stage on which he and his pupils are the chief actors, that the proper emotions and feelings will be strongly aroused, thinking processes stimulated and guided, and adequate opportunities given for the practical expression of emotions and the intelligent application of decisions and plans, preferably in constructive activities which are recognized by them to be eminently worth while.

It is admitted that the standard or goal suggested, *i.e.*, making permanent changes in the behavior of the learner, is exacting and difficult of achievement and that, measured by it, many of our current educational practices are seen to be quite inappropriate and ineffectual. But it is not an impossible standard for we do know of persons whose behavior has been radically and permanently changed by certain soul-stirring and challenging experiences. Our task is to make our teaching soul-stirring and challenging. I admit that to do this perfectly is extremely difficult and demands more ability than most of us possess, but any other standard is inadequate and unworthy of our high calling. Teaching effectively *never* was an easy thing to do and *never* will be. The proper education of youth is at the same time the most important and the most difficult task that devolves upon human adults, and one which cannot be neglected or bungled with impunity.

So let us not be led astray by highly publicized educational panaceas which claim to be all sufficient and foolproof. Let us rather get well in mind those *few really* fundamental principles and conditions which are basic in human learning and then devise learning situations which will implement most effec-

Future Farmers of America

A. W. TENNEY

The Contribution of the Canal Winchester F.F.A. Chapter to the War Effort

RALPH E. BENDER, Instructor,
Ohio State University

"THE Contribution of the Canal Winchester F.F.A. Chapter to the War Effort," was the topic of a radio broadcast given recently over station WOSU of Columbus, Ohio, by a group of Future Farmers representing the chapter. The script used in that program is recorded here because it relates what one chapter has done toward the war effort and it likewise represents a way of presenting such accomplishments thru a radio program. The program was presented by three members of the F.F.A., John Boving, Dick Hummel, and Chester Denton; a student teacher, Mr. Roy Von Ins, and the adviser, Ralph E. Bender. The F.F.A. boys were selected by the members of the chapter on the basis of their contributions to the war effort and the quality of their voices as they came over the public address system of the local school.

R. E. Bender

The script follows:

Mr. Bender: "Boys, in the famous house divided' speech Abraham Lincoln said, 'If we could first know where we are and whither we are tending we could better judge what to do and how to do it.' It was with such a thought in mind that I asked you to meet together here at this time. You are officers and leaders of the Future Farmers of America, and I am convinced that it would be a good thing for us to talk over and evaluate some of the war effort activities that we have accomplished and some that we are at present undertaking, before we plan the additional expenditures of labor, talent, and money. I don't suppose that Mr. Von Ins will mind hearing us review our work."

Mr. Von Ins: "That's right, Mr. Bender. I have been hearing a lot about the contribution that the F.F.A. chapter has been making to the war effort, and I would like to learn more about it. I understand that you had quite a scrap drive a couple of months ago. How much scrap did you collect, Chester?"

Chester: "In co-operation with the local Hi-Y club we collected approximately 100 tons. We estimated that this amount of metal would build 12 light tanks."

Mr. Von Ins: "That's quite a record. How did you do it?"

Chester: "First of all, we made a survey in which we contacted all the people in town. We found where the scrap was located, and the kind and amount available, whether it was to be sold or donated, and when we could secure it. Then on three different days the boys brought in three trucks and a couple of trailers to collect it. There were about 40 boys who helped at different times to get it in."

John: "Chester, I think you should have mentioned that we did this work on school time, and it was just about as interesting as being in the English class."

Dick: "I agree with John that it was an interesting and worth-while experience. We had the fun and experience of wrecking windmills, threshing machines, and all kinds of farm equipment. When we arrived at one house the woman had her dinner cooking on a stove; she removed the pots and pans, we removed the fire and loaded the hot stove on the truck to send it on to help cook the Japs. The Ohio Midland Light and Power Company, a local concern, liked what we were doing so well that they donated a 40 ton bridge to the drive."

Part of F.F.A. group that collected 100 tons of scrap

Mr. Von Ins: "That's certainly interesting and good work. Did you make any money on it?"

Chester: "Sure we made some money. We had about $800 left after paying for the scrap that wasn't donated and for the use of the trucks and trailers. John, you tell what we have done with this money."

John: "One hundred dollars is being used to provide all of the local boys and girls in the service with *The Times* which is our local paper. The paper is sent to

divided equally between the Hi-Y and F.A. to be used for additional war effort projects."

Mr. Bender: "Boys, I believe it would be interesting for Mr. Von Ins and others to know that at the maturity of the bond the money is to be used to furnish a room in the proposed new town hall. The room, which is to be used for community civic functions, will be dedicated to the boys and girls in the service. In the room will be a plaque with all of their names thereon. We think that this type of thing will be appreciated."

Mr. Von Ins: "I think that's a fine idea, maybe some of you boys will have your name there, too. Have the F.F.A. boys, as individuals, purchased any bonds?"

Chester: "Yes, we have. At present 16 boys own $1,550 worth of bonds and many more own stamps. We recognize those boys by having their names and the amount of the bonds posted on a roll of honor which is placed in our agriculture room. By the end of the school year we are planning to have every Future Farmer own a bond or at least have a start in that direction."

Dick: "Another war activity of the chapter as a group was the contribution of $33 to the war chest. This money was made by husking 330 bushels of corn for one of the farmers in our school district. This was likewise done during one of the school days last fall. The farmer really appreciated this service because he was very short on labor."

John: "Dick, you forgot to mention one of the most interesting parts of the corn husking activity."

Dick: "What was that, John?"

John: "Why, the pretty girls, of course. You should recall that the home economics girls brought us our lunch to the cornfield. The chili and other good food gave us enough pep to continue to do some good husking in the afternoon."

minds me of the tremendous amount of food that will be necessary to win the war. In looking over the summary of your farming programs of last year I noted that 28 boys of the F.F.A. produced over $42,300 worth of food products. That would be enough food to keep 250 soldiers in rations for one year. In this amount was included 160,440 eggs, 226,128 lbs. of milk and 51,000 lbs. of pork."

Chester: "By the way, Mr. Von Ins, do you know that included in that amount of pork were 13 official ton litters that were produced by six boys? I suppose you know that to make an official ton litter it is necessary to produce at least 2,000 pounds or more of pork from the litter of one sow in 180 days or less. This record of ton litters was the best of any chapter in the state last year."

Mr. Von Ins: "How did you boys manage to produce so many ton litters?"

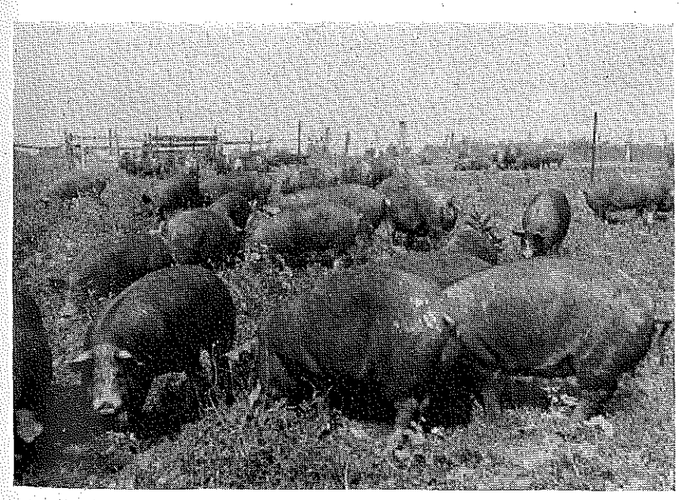
Chester: "I don't believe there is any secret to this matter of producing a ton litter. The boys at Canal Winchester have well-bred stock that has been selected on the basis of producing large litters. Practically all of the boys full-feed a balanced ration under sanitary conditions."

Dick: "Chester, I think you should have mentioned the fact that most of the boys are using good equipment, much of which has been built in our farm shop at school. For example, this year we have built 33 individual farrowing houses, 7 feeders, several pig brooders, and many hog troughs."

Mr. Von Ins: "That's fine. I am glad to see good use made of the farm shop. Do you use the shop for anything else?"

John: "Yes we do, besides the construction of appliances from wood we do such things as soldering, glazing, forging, electrical work, and sharpening tools. We likewise do a lot of repair work on farm machinery. Worn and broken parts are replaced and adjustments are made so that it will be in the best possible running condition. We will need to do a lot more of this type of work in order to make the farm machinery last for the duration of the war."

Mr. Von Ins: "I can see why this farm machinery repair work is very essential



Part of the 13 ton litters of pork produced by six Future Farmers

production. Have you done anything about the victory garden idea?"

Dick: "Yes we have. Last spring we distributed 500 copies of a gardening guide. In this guide we made recommendations concerning the varieties of vegetables to grow, the time of planting, proper spacing, and the cultural practices to use in order to get good results. We are revising the guide, which will be distributed again this spring. Many of the boys are planning the gardens for their home farms. I guess some of them are even planning to grow some spinach this year."

Mr. Bender: "Boys, I realize that scrap iron, bonds, and food are all very essential in helping to win the war. There is however, another phase of work that I believe we have been doing and it is equally necessary. I am referring to the morale of the people and particularly of those boys in the armed forces. At the present time 31 of the former members of our own F.F.A. chapter are in the service, at home and abroad. Dick, what are some of the things that we have done for them which show our interest and appreciation in them and the cause for which all of us are fighting?"

Dick: "As was indicated earlier, all of these boys are receiving the local paper each week. In this paper is a special section devoted to the boys and girls in the community in the service. Addresses, promotions, and letters from the boys are included in this section. I am sure that they appreciate getting this paper. We have attempted to correspond with the boys as much as possible. At Christmas we sent greetings from the chapter to all of them."

John: "Dick, another item along this same line that I think is worth mentioning is the fact that the 31 names of the boys are printed on an honor roll, which is posted on our bulletin board in the agriculture room. This reminds us that many of our friends are giving their full time and effort toward winning the war and that we must do our part on the home front."

Chester: "John, I think that is right. We are likewise reminded of the horrors of war by the pictures that are posted on our bulletin board, which is entitled,

from magazines and newspapers by a committee of boys each month. The pictures aren't pleasant to observe, but they do give us a better idea of the realities of war, they make us more appreciative of what our boys are doing, and they make us more determined to do as much as we can to eliminate war forever."

Mr. Von Ins: "Boys, it has been interesting to learn about some of your war effort activities, and I am glad to know that you and other Future Farmers are doing your part to help win the war. Chester spoke of the morale of the boys in the service but did not mention anything about the morale on the home front. In my contact with you boys and your program I have been pleased to know that you have been keeping up the morale of your own group and community by conducting such worth-while activities as the community fair, parent-son banquet, public speaking contests, and parties in much the same manner as in years past. I believe this plays an important part in the war effort."

Mr. Bender: "I think you have made a good point, Mr. Von Ins. In our Future Farmer work we believe that we should conduct a large and well-balanced program so that we will develop into good farmers and citizens. We want to be capable of exercising leadership and cooperating with others who are interested in living in and maintaining a democratic society. I am glad that we have made some contribution of our time and talent. Even tho we may have done well we need to do more. I am quite sure that all Future Farmers may be counted upon to do their best."

Book Review

Vocational Education, Part I of the Forty-Second Yearbook of the National Society for the Study of Education, pp. 494, paper cover, edited by Nelson B. Henry, distributed by The Department of Education, The University of Chicago, Chicago, Illinois, list price $1.00. This report was prepared by the society's committee consisting of Franklin J. Keller (Chairman), Earl L. Bedell, Beulah I. Coon, Oakley Furney, Ben G. Graham, Grayson N. Kefauver, Frederick G. Nichols, Thomas H. Quigley, and associated contributors. The 1943 Yearbook not only extends the exposition of the vocational topics treated in earlier publications of the society to include many additional types of training and current practices in administering the appropriate programs of instruction but also provides a challenging definition of the legitimate objectives of vocational education and the relation of these objectives to the total educational program to be implemented by schools and other agencies in the interest of social progress. The volume holds stimulating values for school administrators, teachers, and parents, for public officials and welfare agencies, for employers and employees, and for research enterprises in both educational and occupational areas. The report is the most comprehensive publication dealing with the problem of vocational education that has come to the attention of the reviewer, and it should find wide acceptance on the part of persons interested in vocational education. Agricultural teachers, teacher-trainers, and agricultural supervisors should make this Yearbook a *must* feature of their

Twenty-Five Years of Vocational Agriculture at Denison, Iowa

REX E. RUCH, Teacher, Denison, Iowa

THE year 1942, marked the 25th anniversary of the vocational agricultural department in the Denison Community. As a result of this achievement, Denison, with two other Iowa high schools, Strawberry Point and Newton, was honored at the 1942 vocational agricultural conference at Ames for 25 years continuous operation since the introduction of the Smith-Hughes Act in 1917.

W. W. Stanfield, Archie Silletto, Elmer Darling and Rex Ruch have served as instructors in the Denison department in the order named. By virtue of a period of long tenure, each instructor has had an opportunity to become well acquainted and make a contribution to the community.

Hundreds of local farm youth have received agricultural instruction and guidance in the Denison high school during this 25 year period. Many of the graduates are local farmers today, while others are working in related fields. Some are vocational agricultural instructors. Quite a large sampling pursued courses at the state agricultural college, and some of these boys returned to Crawford county farms.

Some Concrete Accomplishments

The problem method of teaching has been followed in the classroom with much emphasis being placed on the supervised practice programs. The subject matter has been presented as much as possible on a seasonal basis and cross-sectioned to a certain degree. Close correlation of the project program with classroom work has been directly responsible for the introduction of improved home-farm programs. Approximately 80 purebred boars were sold by the boys last fall, while thousands of bushels of new improved Boone oats can be traced back to a 10 bushel lot of seed purchased by one of the boys three years ago from the Iowa Small Grain Growers Association. Five hundred apple trees were started last year as a co-operative F.F.A. project. Hibernal and Virginia crab scions were grafted to French crab roots. These will be top worked later and distributed over the country. Such projects have gained favorable recognition and have demonstrated the value of the local program.

Encouraging Rural Youth to Attend High School

Farm boys were backward in attending high school in the early years of the department; consequently, the names of some town boys are found in the early records. Thirteen rural boys from three adjoining townships were enrolled in high school in 1922. In the year 1940, 36 farm boys were enrolled from these same three townships. More rural girls than boys attended in the early years in comparison to a more equal distribution today. Approximately one fourth of our present high-school enrollment is rural today, and the vocational agricultural department claims some credit for the increase.

dents enrolled in high school in 1931 was formed to visit rural schools to present educational programs of a recruiting nature. Several features of these programs were as follows: a letter stating the opportunities in high school was taken in shorthand on the blackboard by a rural high-school girl. The letter was typed later using a blind keyboard much to the amazement of many youngsters, who never before had seen a typewriter. The typed letter was left at each school posted in a conspicuous place on the bulletin board. The courses of study available in high school were explained, with emphasis being placed upon vocational agriculture for farm boys. Some shop skills were performed. A favorite procedure of much interest to the boys was the construction of a rope halter, which was usually left with the proud owner of a pony. Often the halter was fitted to the pony then and there on the school grounds.

This program proved effective in motivating student interest. It has been the writer's observation, however, that parent interest has been more easily obtained thru project results and by accomplishments particularly in shop work. In other words, parents recognize good projects and are anxious that their sons have these types of opportunities.

Developing An Adult Program

Thru the adult education program, the department has contacted hundreds of local farmers over a period of years. Productive and economic topics have been discussed and improved practices recommended. An advisory council has been used in planning and administering the program. Thousands of agricultural bulletins have been explained and distributed at these meetings. Enrollment in adult classes has grown from an average attendance of 15 to 20 to some programs where approximately 100 farmers have attended regularly. The OSY and OSYA classes in metal work and farm machinery repair have benefited approximately 200 enrollees in the past two years. Thirty farm tractors have undergone complete repair jobs within the last two months in the school shop, while many other farm machines have been conditioned for spring work.

Vocational agriculture grew out of conditions during and following World War I. It has since served agricultural communities during prosperity, depressions, and crises of all types influencing greater numbers of people each year. Last year in Iowa there were 203 departments. Enrollment in high-school classes reached 7,930 farm boys, while 11,236 adult farmers were enrolled in evening school classes. In the critical period ahead, vocational agricultural departments will continue to assist farmers in solving problems as they increase in number and importance. Improved methods, more efficiency in livestock feeding, more efficiency in the use of labor, and better planning are increasingly important today in the face of war production goals.

objective the idea of enlightening farm people on new improved practices, improved skills, economic problems, and all other matters that would make life more profitable and enjoyable on the farm. The department has co-operated with all other agricultural agencies with educational assistance. It has been the policy to present both sides of controversial subjects, to educate people rather than to force new ideas or programs on them. We hope that the department may continue for many years to aid in achieving more successfully the goals of the program.

Bulletin Boards in the Farm Shop

RALPH J. WOODIN,
Department of Agricultural Education,
Ohio State University, Hilliards, Ohio

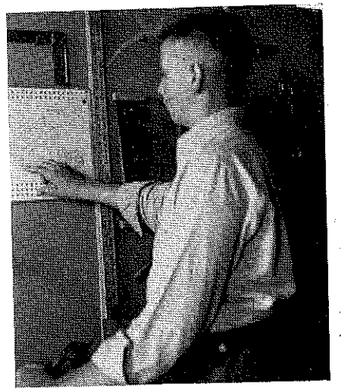
INDIVIDUAL bulletin boards in the farm-shop room can make for more efficient use of plans and sketches by boys enrolled in farm mechanics. After completing a sketch or plan preparatory to building a project, the student thumbtacks his plan to a small bulletin board where he and the teacher may refer to it as the work progresses.

Ten of these individual boards have been provided in the Hilliards farm-shop room. One is placed over each boy's work area on the tool board. The boards are simply 15″ x 15″ pieces of wood fiber board.

Results

Some results of using the individual bulletin boards seem to be as follows:

1. Students make more use of plans by having them conveniently accessible.
2. Plans of large projects which require several weeks to complete are not lost, soiled, and disfigured during the time they are needed.
3. The teacher has a convenient check as to whether each boy has planned his work.
4. Since all sketches and plans are on public display, students develop pride in making better plans and sketches.
5. Further appreciation of the importance of planning before working is developed on the part of boys.



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