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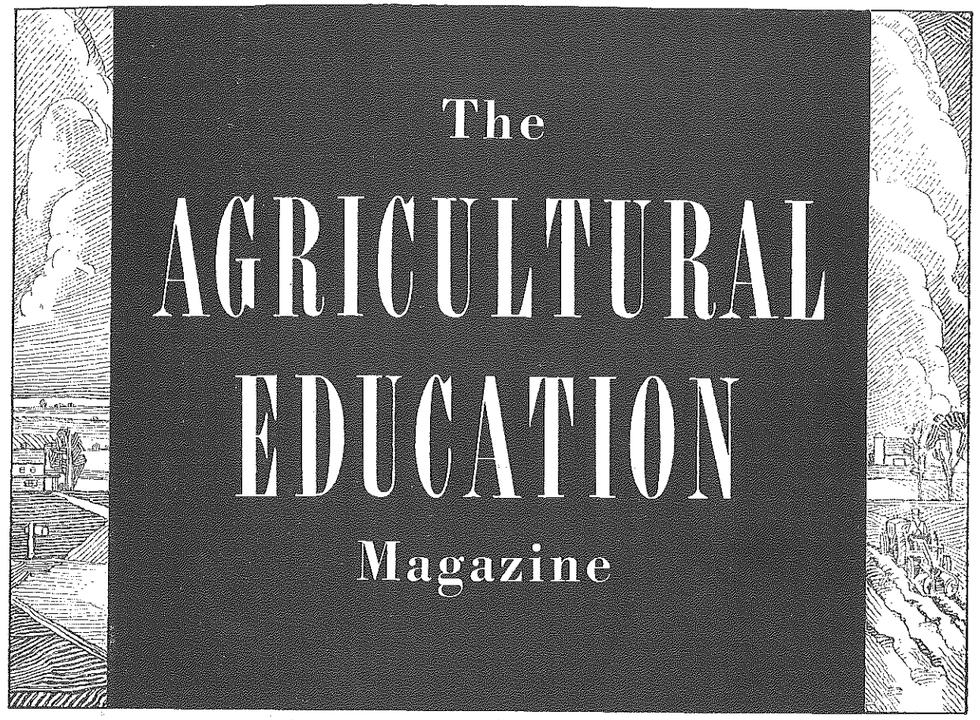

Truthfulness is a cornerstone in character, and if it be not firmly laid in youth, there will ever be a weak spot in the foundation.—J. Davis

Agricultural Education Magazine

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Editorial Comment

What Are Part-Time Classes in Agriculture?

Editor's Note: Comments in this article are based on observations and experiences of the writer in conducting part-time classes as a means of providing trainees with participating experiences in part-time work and as a phase of the teacher-training program. See picture of young farmer classes taken on a field trip to study successful types of farms. Page 58.

IT IS doubtful if it is possible to find any answer to this question that will hold for all part-time classes now operating under Federal and state acts and programs for agricultural education. We now have some notions about part-time classes based perhaps more upon inference than seasoned experience. No doubt a great deal of pioneering and experimenting will need to be done before we can come to any positive conclusions. Perhaps we will discover in our study of the characteristics of boys making up part-time classes, and of the content and organization of instruction adapted to meet their individual needs and goals, that any attempt to define the part-time boy or the part-time class in terms of the average will be futile. Perhaps it will prove more profitable in time to recognize types of part-time classes organized and conducted to meet varied goals and needs of different groups.

We can, however, discover and analyze carefully the problems and conditions that confront us in organizing and conducting any *particular* part-time class; and on the basis of our analysis we can state the characteristics of an *actual* part-time class. In time our cumulative experience may make it possible to make some statements that will hold at least for *types* of part-time classes, if not for part-time classes in general. For the present then every part-time class should be looked upon as an interesting experiment. This does not mean there is no need for planning in advance but rather that very careful planning is required, based upon a study of the characteristics of the individual boys making up the classes, a careful survey of their farming, educational and social status, and of the goals and objectives they may have in the farming business. In carrying out his plans the instructor needs to take the attitude of an interested and observant spectator in order to discover the things that seem to work and the reactions and attitudes of the different members of the group. He may need to shift gears quickly and frequently in order to make some unexpected grade or to avoid some unforeseen obstacle. Without such a watchful and analytical attitude he may not be able to make much use of the experience he does acquire as a means of improving his part-time program and doing a better job in the future.

Recognizing the necessity for a critical attitude, some of our most common assumptions regarding part-time work should be examined in the light of conditions and problems we meet in particular and actual part-time classes. For instance, it has been assumed that boys in the part-time group will be from 16 to 24 years of age and that the average age will be about 19 or 20. Perhaps the age characteristic of the part-time group will prove to be one of the most general and constant of all. On the basis of age alone experience seems to show that there is much to be said for drawing a line between the adult evening class and the young farmer part-time class for, irrespective of any differences that may be found in farming status of the two groups, there are certain characteristics due to age, maturity, experience, social adjustment, etc. which will warrant their segregation into separate classes. For example, in one community where the writer has conducted evening classes for ten consecutive years except one as a phase of the teacher-training program, there have always been a few young farmers in attendance but rarely has it been possible to get any active participation and discussion from them. They merely assumed the attitude of interested spectators. But when both a part-time and an evening class were organized in this community this year, the boys who had been merely spectators in the evening classes become wide-awake and active participants in the part-time class. Besides, a number of the younger age group who never could be induced to attend evening classes became active and regular attendants in the part-time class. So, on the basis of age differences alone there seems to be a need for two separate groups. But the age limits should be made flexible. Boys of 18 to 20 and young men of 26 to 27 may prove to be congenial and compatible.

Again it has been said that boys in the part-time age group are interested in getting started and established in farming in contrast to the experienced farmers in the adult evening classes who in the main are already well started or established in the farming business. No doubt some such differences in the farming status and objectives of the two groups can be recognized. However, in one part-time class held this year (ages 19 to 25) several young men were well started and established in farming on an ownership basis and some had more capital invested or at their command than many farmers in evening classes will ever have. Much of this they had actually earned, too, through hard work and good management. They are *now* established farmers and citizens of the community. Their success to date has made them intensely interested in still further improvement of the organization, quality and size of their farming business. Such young farmers were in a class with other young men on the hired-man level, with renters, and others representing almost every possible level and combination in farming. Should the well established young farmers have been placed in a separate class? They have not seemed to fit into an evening class. In the other part-time class the differences, if any, were still greater. There was no average, or median, part-time farmer. How such a mixed group was handled is another story. Brief case studies of actual farm setups among members of the group were combined with field trips to study successful farms and the methods of starting and establishing farming.

Again, how much can we assume in advance and without investigation about the previous education of the part-time group? In each of two part-time classes this year a few boys had one to two years of college work. About half were high-school graduates and most of the high-school graduates in one class had had 2 to 4 years of Smith-Hughes agriculture. Others had not gone beyond the elementary school and some perhaps did not have capacity for high-school work. These differences in education and economic levels tend to create social cliques within the class. Perhaps we will discover that one of our goals in a part-time class is to break down social barriers and to promote a neighborly feeling and good will in order that young men located in the same community may learn to live together, play together, and work together in a truly co-operative and democratic manner.

Another problem: How shall we manage the former Smith-Hughes and F. F. A. boys in our part-time classes so that they will be an asset and not a liability to other members in the part-time class? Most of our former Smith-Hughes and F. F. A. boys are within the part-time age group. We have frequently heard it said that these boys should form the nucleus of the part-time group. How can we best develop in these boys a feeling and attitude of social responsibility for the welfare of the other members of the part-time class so that the F. F. A. boys may be the means of uniting rather than dividing the interests of the part-time class? Perhaps the F. F. A. boys when in high school agriculture can be helped to look forward to this opportunity and responsibility in the part-time classes. In any case, through individual conferences and otherwise, the F. F. A. boys should be made aware of their opportunities and obligations in promoting the social and community interests of all boys in the part-time classes.

The great variability among boys in part-time classes with respect to education, social interests, and economic status presents many challenging problems. The solution of these in time will make it possible to describe more clearly the characteristics of the part-time boys, to define their goals and objectives, and to determine the types of classes, activities and organization best adapted to achieve the desired goals. By trying out new ideas, searching for the best methods others have formed, and, most important of all, by observing and analyzing our own results and methods, we will find the answer to the question, "What are part-time classes?"—H. H. Gibson, Department of Agricultural Education, Oregon State College

A. K. GETMAN **Professional** R. W. GREGORY

The Future of Adult Education*

WILLIAM HEARD KILPATRICK, Professor of Education,
Teachers College, Columbia University

IT IS not prophecy but the discussion of a desirable policy that constitutes the aim of this paper. When we are clear on policy, steps can be directed intelligently. The finding of a defensible policy is thus the first step on the road toward intelligent action.

How shall we rank the *Adult Education* movement? From time to time new and highly significant advances appear in the development of civilization. Democratic government may be named as one such advance. Universal tax-supported education is another. Possibly a new economic democracy is even now arising to constitute a third. For myself, I am convinced that the *Adult Education* movement of our day ought to become important enough to be included with the others as a genuinely significant advance in the historic development of our civilization.

It frequently happens that when any such advance is coming to be recognized as significant, certain ones will seek to disparage it on the ground that it is not really new. We have long had efforts and activities that could properly be called adult education. The assertion is true, but the implication is false. Nothing significant ever springs suddenly into being, and it is no disparagement that any rising movement has long been present in unnamed anticipatory forms. The important thing is that a really new phase of conscious importance has been attained. This is now distinctly true of adult education.

That we have always had social activities and even institutions that educated out-of-school adults is clear beyond question. The New England town meeting was highly educative. The popular churches, especially where congregationally managed, have likewise had profound educative effect. Mechanics institutes of an earlier day and labor unions of a later day have been more precisely educative. In fact, every organization of every sort that discusses its aims and plans is educative. Political parties may thus be definitely educative. The most significantly informal educative movement in American history was the study of constitutional government that accompanied the American Revolution and culminated in the making of the Constitution. This is in fact one of the significant developments in the social-intellectual history of the world. That it was the result of widespread shared study seems beyond question. What we did then by a study of political democracy, we should repeat in the next generation in the realm of economic-political management, but this time the study must be more widespread.

The term, adult education, came to this country from England just after the World War. Some of us recall meeting with Mr. Mansbridge as he told us of the movement in that country. England, in our eyes, is a curious compound of caste and democracy. Adult education was an effort to even up, in a measure, the education of the underprivileged. Not all Britishers agreed with Mr. Mansbridge but it seemed fairly evident, to me at any rate, that he meant adult education as a kind of social opiate to make the workers more content with the stations in life into which they had been born. His stress was on culture in preference to social and economic problems.

We have underprivileged in this country also. But we are increasingly seeing that it is a state of affairs we cannot afford, not only from considerations of democratic justice and equality. Illiteracy is an economic handicap not only to the illiterates themselves, but also to our production system. The illiterate are by that very fact not so economically productive as a better education would make them. From a mere production-of-goods point of view we must raise the educational level of large numbers of our people. The cost in dollars would be more than offset by the added net income to the country at large.

The same thing is true of re-education in trade and vocation. We cannot afford to scrap workers just because their particular skill has been outmoded by a new machine. We must re-educate them vocationally, and again not simply because it is the just and decent thing to save a man's morale but because it will pay the country in the increased output of productive goods that he can still furnish. This too will pay in dollars and cents.

But most strategic of these possible human savings are the unemployed adolescents. These now threaten to be our most strategic waste. Unless we can somehow take adequate care of their morale and see them safely settled in jobs and married, with homes of their own—unless these things can be done—this group becomes our chief source of criminals and derelicts, a price we cannot afford to pay. And again, is the mere money cost prohibitive? To take adequate educational care of these young people, with an education that fits them, is far less expensive in dollars and cents than to let them lose self-respect and drift into crime and vice.

These demands on us to take just and proper care of the underprivileged in our midst represent what may be called remedial lines of work. They are absolutely necessary because of our past sins and present social shortcomings.

But we must not be content with remedial work. It is the positive program of construction and prevention to which we must give greatest heed to make life finer and richer for all together. It is this long-term program that most concerns me, an intensive program actually inclusive of everybody. It may be that the term, adult education, is too heavily laden with underprivileged implications to carry the burden we need to put on it. If so, let us adopt another name. As for that, I care not; it is the thing that counts, the new social program of ever-continuing, inclusive education.

And why do we wish or need universal adult education? The answer is clear. There has come a new need for ever-continued thinking in the world of human affairs. In an older day custom and recognized authority ruled, custom in ordinary details, obedience to authority in new and greater matters. In a way that we of the modern world can hardly conceive, authority and unquestioned obedience thereto ruled among men. Politically we find this in feudalism and later in the divine right of kings. The same authority and unquestioned obedience ruled in religion, where the church or the book was the final appeal. A like authority and obedience ruled also in matters of thought. Men thought as they were told to think.

In various ways has this rule of custom and obedience been gradually broken down. The Renaissance reinstated a world of secular thought and refined enjoyment. The Reformation taught men, probably unwittingly and even unwillingly, to put individual conscience first. A new science taught men a new confidence in human thinking. Successive political revolutions in England and France united with this new science to destroy the divine right of kings, and usher 18th century liberalism and political democracy.

But still custom ruled for most people in most aspects of life. Then came the industrial revolution with the later growth of technology and its application to large-scale production. Life has become very different, with very, very rapid changes in ways of producing, in ways of living, in ways of thinking. The sway of tradition has been broken as never before. Greater changes of attitude have come in the past hundred years than in thousands before. Probably a larger proportion of our people are now uncertain about fundamentals than ever before in all history.

But this is not all. The Great War shook civilization to its depths. The great depression has made our people question our economic system as never before. And this is not yet the end. With science growing in geometrical ratio there promises ever more rapid change. New problems thus arise and must, so far as we can foresee, continue to arise forever. Modern man faces, as never before, the continual demand to meet and solve new problems. It is a permanent new demand. And we dare not refuse it. The risk and danger would be prohibitive.

Continual new problems mean continual new study. And if democracy holds—as I for one most sincerely hope it will—all must study, not simply the so-called leaders. Each one is a leader of some, and all must at least understand if they are to co-operate intelligently. And no 12 years of schooling, nor 16, nor any fixed amount, can suffice for the ever-coming new problems. All citizens must study, no matter what previous learning. We must have nothing less than universal, ever-continuing adult education.

And how widely shall we study? What problems should engage our attention? For answer we ask, "How wide is life?" New situations and new problems may be expected to arise in all areas of life. Without proper study any affected aspect of life is in danger of not being as good as it should be. We can draw no lines to cut off any significant part of life. Our question can only be whether the matter counts sufficiently in life.

We must maintain the remedial aspects mentioned earlier. They constitute a positive moral and democratic duty which we cannot neglect. To attend to them pays, socially pays, measured by any standard. But in the long run the broader and deeper study of our civilization itself is what counts most. It is the most essential. It promises the greatest returns.

Who shall pay the bills for this universal study? The support must finally come from all the wealth of all the people. There is no other way. As I see it, this means support by public tax money—partly local, partly state, partly national—in order to even up inequalities. That the main work be tax-supported and therefore publicly controlled does not deny freedom to any and all to study as they will be volunteer organizations and otherwise. But in the long run only public support will suffice.

How shall this inclusive system of adult education be managed? The fundamental principle of management must be to serve, not to rule. Each local group must control itself, with the possibility of getting advice and help on support upon reasonable conditions. But there must be helpers and advisers provided at public expense, and these (not the people who study) must be managed by some scheme of shared local-state-and-national control. These helpers will stand ready to encourage study-groups and forums, suggest possible lines of study with suggestive materials and sources. They will also help arrange lecturers and guiding-helpers.

Who shall say what shall be studied? Please notice that I did not ask, "What shall be *taught?*" Each local class-group must be its own final judge of what it will study. In time, we shall hope that everything in reason—anything that is not positively harmful—will be "on tap," that is, available for study with positive help and encouragement. Naturally, we must begin with what seems most insistent. It is a great task we are undertaking and a long time will be required to get it all going.

And how will the study or work go on? In every conceivable way, depending on what is being studied. The most common may be a small discussion-study group. It may be, however, a machine shop in which vocational re-education is going on. It may be a class working at wood carving under the guidance of some expert. It may be chorus singing under a leader. It may be group-working with boys and girls in the cellar clubs of the poorer districts. It may be a class in English for foreigners. It may be a group of foreign-born wives and mothers learning how to care better for their children and families under American conditions. It may be a group of lawyers and businessmen studying our money system.

Whatever we do we must get as far as possible away from the teacher-assignment, pupil-recitation notion of study. To continue that would be just plain movement-suicide. Grown people will never stand for it, and should not. It is bad for children, too, if the truth be told.

Will the system be propagandist? Where the matter is controversial, no. But where there is reasonable agreement among the capable in the field, genuine effort will be made to spread better practices, as we have long done with agriculture and homemaking. Where the matter is still controversial, care will be taken to have all significant options studied. The system as a system must be very careful not to be propagandist of any partisan position, particularly of the theory of the party that happens then to be in power. Contrariwise, the system must be careful to foster the genuine study of any significant problem. The words *genuine study* give the proper answer to our question.

But are the lecturers not to be permitted to say what they honestly believe? Most certainly they will be so permitted, but they must know that it is study and not indoctrination that they are seeking. In particular the system must afford in any public forum fair opportunity for the proponents of the unpopular side. This is the acid test of free speech and free study. It is genuine study by the people that we seek.

When is all this to begin? It has already begun. The depression has helped to give it a great start. And we shall never permanently give up any part of it which shows that it serves a real need. This is the next great educational movement. It has begun. It will be continued. May it come in fullness, and speedily!

*An address delivered at a regional conference of the Education Division of the Works Progress Administration in New York City, on April 27, 1937.

Film Strips in Teaching Agriculture

SAMUEL L. HORST, County Supervisor,
Norristown, Pennsylvania

NO ARGUMENTS or statistics are necessary as to the value of visual aids in teaching. We all realize and appreciate the fact that, by the use of visual aids as supplementary material, our teaching is more efficient. Physiologists tell us there are 24 avenues to the brain from the eye for every one from the ear, and psychologists tell us that we remember 60 percent of what we see and 20 percent of what we hear. These two facts alone are enough proof that visual material should be an important teaching tool.

Either consciously or unconsciously all teachers use some form of visual aid, such as the blackboard, bulletin board, apparatus, charts, pictures, exhibits, textbook illustrations, demonstrations, diagrams, drawings or sketches, field trips, graphs, maps, models, museum material, photographs, postcards, posters, specimens and the various kinds of projection material, such as slides, opaque objects, motion pictures—sound and silent—and the film slide or film strip.

My discussion will stress the film strip. It is not a new idea. It has been on the market for a number of years and it is used more extensively each year.

The film strip consists of a series of still pictures, such as might be used for lantern slides, printed on 35 m.m. standard-width, non-inflammable motion picture positive film.

All of us become somewhat enthusiastic about certain phases of our work, certain fancies or certain hobbies. I am enthusiastic about the still film and I may get into an argument with the motion picture enthusiast. My frank and personal opinion is that the motion picture has certain values, but for real teaching value I prefer a still film. With this the picture may be projected on the screen for any length of time that is necessary to form an impression on the mind of the pupil. The picture may be discussed and the various important parts or points may be emphasized before the scene is changed. The film strip may be compared to a specific object in a landscape and the motion picture to the landscape in this entirety. If we look at a particular object in a landscape, such as a good Jersey cow, we will remember it much better than if we look at the panoramic view. The film strip shows one thing at a time; it permits time for the pupil to assimilate it. You see thousands of pictures at a motion picture show. Did you ever stop to think how many of the pictures you really remember?

Film strips are an inexpensive form of material for visual presentation. Films can be purchased as low as twenty-five cents each.

The film strip is also going modern in that sound records accompany some of the films. You, of course, are all acquainted with the sound film "The Sweet Earth," showing and telling about the importance of lime. A number of other films of the same nature are available thru various sources such as your local automobile dealer, farm implement dealer, and your electric light company.

The Projector

Various types of projectors are on the market. I use and prefer what is known as a tri-purpose projector which is simple and compact. Tri-purpose has a reference to three purposes, namely, for single frame pictures such as are obtained from the United States Department of Agriculture where the frame or positive is ¾"x1"; for double frame positives such as are taken by the Argus, Leica and other candid cameras (the frame is 1"x1½" in size); for 2"x2" glass lantern frame slides.

The advantage of the small lantern slide is that it is less bulky than the standard size slide. If you have positive films and you do not like the order in which they are on the strip, the frames

(Continued on page 57)

A Promotional Program for Vocational Agriculture*

J. B. PERKY, State Supervisor,
Stillwater, Oklahoma

"To know a thing is nothing if you've not a chance to show it,
And to know a thing is nothing, unless others know you know it."

THERE is a growing feeling among the men in the field that vocational agriculture is suffering from the lack of a militant, functioning, promotional program. There is too much resistance to the program from school administrators; and, in some localities, from those who could be benefited most. With both groups, this resistance is largely the result of a lack of understanding of the program. It is the task of the agriculture teachers and the supervisors to break down this resistance and so to interest the public in the program that there will be more general appreciation of its value.

Vocational agriculture as a service needs and is entitled to the thoro understanding and appreciation of the general public. Obviously, the one hour allocated to a consideration of this problem is inadequate. The time allotted will barely permit the presentation of a general outline designed to promote understanding of the program and to create good will for it. Just as you have often heard, "It takes a lot of swallows to make a summer," likewise a multiplicity of things must be taken into consideration in an attempt to achieve understanding and good will for a special kind of service. The following outline is offered as a guide for the consideration of those desirous of formulating a promotional program.

I. Groups to be contacted
   - A. Individuals: 1. Superintendents and teachers; 2. Local editor; 3. Banker, etc.
   - B. Agencies: 1. Civic clubs; 2. County commissioners; 3. Etc.

II. Materials to be presented
   - A. Basis for the program for vocational agriculture.
     1. Needs of—a. The farm youth in the school; b. The farm youth out of school; c. The adults in the community.
   - B. The vocational agriculture program: 1. Types of schools; 2. Training objectives; 3. Costs.
   - C. Accomplishments: 1. Farm youths established in farming; 2. Improved land utilization; 3. Livestock improvement; 4. Home improvement; 5. Closer relationship between farmers and businessmen, etc.

Every teacher of vocational agriculture should be a salesman.

*Parts of an address before the Agricultural Education State Supervisor's Sub-Section of the American Vocational Association, Baltimore, Maryland, December 1, 1937.

DEVICES	WHERE TO USE THEM	HOW TO USE THEM
A. Newspapers (Press) 1. Daily 2. Local, Weekly 3. Magazine	Local paper-daily paper Local community, state, nation.	1. Project feature stories 2. Editorials 3. Photographs of boys' projects 4. Group pictures 5. Pictures of outstanding boys 6. Technical information 7. Farm briefs 8. Cartoons 9. News of community events 10. News of state and district
2. Talks	Civic organizations Farm organizations Community meetings Social organizations Churches Women's clubs School assembly Parent-teacher meetings Lodge meetings	1. Outline some outstanding program of the boys 2. Discuss vital farm problems 3. Acquaint the people with the vocational agriculture program 4. Suggest and outline program for the community 5. Correlate the vocational program with the other school program 6. Have students give discussions at meetings
3. Radio	Broadcasts 1. District 2. State 3. Nation	1. Present programs of outstanding students 2. Present chapter accomplishments 3. Present farm skits 4. Present music and other entertainment 5. Present outline of annual objectives 6. Present F. F. A. activities of the community 7. Present recreational program 8. Present news of chapters in area 9. Encourage listening to as many F. F. A. broadcasts as possible
4. Demonstrations	On the farm In rural schools Fairs and contests Civic clubs Farm groups Floats in parade	1. Give practical technical information and procedure 2. Show abilities developed by boys taking vocational agriculture 3. Show need for vocational agriculture program 4. Show improvements made in the community 5. Give skits and stunts on improved farm practices
5. Direct—by Mail	To prospective pupils To farmers To enrolled students To school patrons	1. Chapter circulars 2. Personal circulars 3. Personal letters 4. Bulletins
6. Visual Education	Classroom Community meetings F. F. A. meetings Other agriculture organization meetings Civic clubs School assembly	1. Show film strips of the program 2. Show slides of the boys' work 3. Show film strips furnished by United States Department of Agriculture 4. Show news taken on F. F. A. trips 5. Make displays of work in show windows 6. Show strips at public meetings 7. Attend livestock and poultry judging contests 8. Display collective exhibit
7. Fairs and Contests	Local, district, state and county	1. Display collective exhibit 2. Take part in judging contests 3. Enter livestock exhibit 4. Participate in crops judging

IV. A WORKING PLAN FOR PROMOTING VOCATIONAL AGRICULTURE

Groups to Be Contracted	Kind of Support Desired	Material to Be Presented at Time of Contact
1. Farmers	Moral support and interest Co-operation, healthy attitude toward program	Program, objectives, accomplishments. Show how the program will benefit "him and his own"
2. Bankers	Financial support Approval of business methods	Individual farm boy's program. Show boy's ability. Show training programs require business methods
3. Newspapers	Favorable publicity Editorial comment	Accomplishments in all lines of work. Appreciation of support
4. Civic Clubs Lions Others	Understanding, elimination of prejudice, financial support, moral support	Conferences, presentation of program and objectives when opportunity affords

Laboratory Equipment

A. GORRELL, Teacher,
Mexico, Missouri

THERE seems to be a definite trend in the use of laboratory apparatus to that type of equipment that can be used on field trips to demonstrate some approved practice. In former years much of the laboratory work was confined to the classroom and dealt with the physics and chemistry of agriculture. In the older-established departments of vocational agriculture there is found laboratory equipment that the teachers no longer use. The most favored type of equipment seems to be the apparatus that is used in the care and treatment of livestock. The second class of equipment favored deals with visual education.

The above generalizations are based upon a study just completed, summarizing the responses from 100 vocational agriculture teachers in Missouri. Each man was asked to check an extensive equipment list in terms of: Do you have it? Do you use it? Would you like to have it? Developed from the replies of these experienced teachers, the following list of equipment is offered as a guide in equipment selection: vaccinating syringes, 40cc, 10cc, and 5cc, balling gun, veterinary thermometer, trocar and cannula, milk fever outfit, drenching syringe (2 oz.), caponizing set, Babcock tester, pipettes, milk and cream test bottles, graduated cylinders, Harvard trip balance, hoof-trimming sets, grooming set, sediment tester, film-strip projector, compound microscope, tripod lens, corn grader, comber test, soil auger, farm level, pruning shears, pruning saws, spray pumps, hi-lo-phosfate test, mor-or-less nitrate test, lac-of-potash test, side-cutting pliers, hog mouth-spreader, docking tongs, sheep shears, wool card, and castrating knife.

From the study made it appears evident that the laboratory equipment should not be uniform for an entire state. In the cotton region of southeast Missouri, for example, there is little need for the equipment used in the better livestock sections. Even in the livestock sections the equipment is not uniform. The sheep section of a state needs equipment that a dairy section would not use.

Proper and Perennial Publicity

THOMAS P. DOOLEY, Teacher,
Jamaica Plain, Massachusetts

TODAY publicity is to business as a light in the darkness. The more proper and lasting the light, the more the public may see and learn.

Proper publicity in education wins and spreads good will. It cases tensions. It clears up misunderstandings. It softens and cuts away the callous skin of bigotry and bias. But educators in general seem to be very slow in recognizing it as a very valuable aid in solving their everyday problems. They are likely to be hesitant in the use of new devices because of fear of unfavorable reactions.

It is admitted that publicity may be "dynamite" in the hands of the inexperienced, and even of the mature teacher.

The writer has made use of it constantly for 20 years in a school system of 5,000 teachers without any known word of criticism to date. He therefore feels that a few suggestions based on his experience may be worthy of consideration by readers of this magazine. Accordingly, to have plenty of publicity and to keep it proper, he submits and supports the suggestions which follow.

1. Try to build up your school, department, or pupils by describing legitimate, honest, and worth-while achievements.

2. Keep your name out of articles, or in an obscure part of them. The public quickly sours on both the article and the writer when he intentionally, or otherwise, injects himself into the main part of the writing.

3. Base your news items or articles on the firm foundation of good teaching in the classroom, on projects or other supervised practice, and on follow-up of graduates.

4. Make publicity perennial.

Application of these principles will be clear if the reader will follow thru a year's program at the Jamaica Plain High School.

At this school full publicity is sought for all the achievements or winnings of our pupils in the summer, fall, and winter shows in exhibits, judging contests, and general school activities, in the local and leading newspapers of Boston. Cuts of any pictures used are obtained, to be used with the articles in the local papers and again in our school paper, the "Clarion." Thus a worthwhile repetition is assured of all news items, and they finally become official school news by being published in our school paper.

News that our pupils intend to exhibit, to judge, or otherwise to take part in the bigger shows, fairs, etc. is very valuable publicity. We see to it that such announcements appear not only in the newspapers, but also in the official programs. If our pupils are to make a long trip for judging, or to spend "High School Day" at the Massachusetts State College, we ask the newspapers to print an announcement. Many times this news is as important as is the publishing of the results attained in judging, or other prize winning.

Every spring we stage an "Annual Agricultural Prize Award Assembly." All the prizes won during the previous year are re-awarded to the agriculture pupils at this school assembly. Proud parents, leading agriculturists and school officials, particularly those from pupil "feeding schools," are invited. The school orchestra, music, congratulatory speeches by guests, a large group picture by a metropolitan press photographer of all the agriculture pupils and invited notables, plus an article prepared for reporters with the names of all the prize-winners, make an event which will never be forgotten by parents, pupils, and others attending.

The periodic publication of the achievements of graduates, particularly in our school paper, is exceedingly helpful in getting students to take pride in their school, their course, and in themselves. Persons interested in the school always inquire about the work of our graduates, especially parents of present pupils and school officials.

Pictures published and gathered from newspapers, and unpublished pictures taken by teachers, are mounted on cardboards to be kept in cases for immediate inspection and to be used at a moment's notice for exhibit purposes, at fairs, hobby shows, etc.

Pupils are being constantly encouraged to take part in all forms of school activities such as athletics, public speaking, and plays. Their achievements are noted and made known to our superiors, advisory committee members, pupils, parents, and graduates. We send out copies of the *Clarion* containing the athletic team line-ups, the casts of plays, and programs of events with the names of agriculture department pupils underlined. We made continuous use of school and department bulletin boards, changing the material every two weeks. This is very effective in publicizing events and achievements. Material is kept on clips, many clippings under the same two thumb tacks, to keep temptingly on view a continually growing amount of material on the same board.

From this it will be evident that we do not confine our publicity to narrow channels. It extends beyond our own particular tasks. It includes achievements of the whole school, and even our whole school system. The good will of, and respect for, our school and school system are thus effectively and perennially fostered.

Results of the proper and perennial publicity which we practice, and which we have found to be a very valuable factor in our everyday school work, may be summarized in conclusion as follows:

1. Pupils appreciate the recognition of honest effort and well-earned rewards.

2. Parents are exceedingly keen in appreciation of the acknowledgment of the worthy achievements of their children by the school paper, newspaper, etc.

3. School officials are alert to recognize and to acclaim the publicizing of the good work of their subordinates as real recognition of their own efforts.

Corn Moisture Testing

NELSON M. COOK, Teacher,
Bourbon, Indiana

FOR the past several years I have given particular attention to farmers' husking corn and storing it in cribs when it contained too much moisture. I have observed many farmers destroying corn that was found to have molded in the crib and was therefore unfit for feed. I have also noticed many farmers feeding corn, that was stored in cribs while containing too much moisture, to livestock and getting poor results. I have often been asked to explain why. In many cases it was due to heat damage resulting from storing corn too early in poorly ventilated cribs.

It occurred to me that a service could be rendered to the farmers if an educational program on this problem could be conducted thru the newspapers. A moisture-testing device was needed in this program; however, the cost prohibited its purchase for use during so short a time. The problem was discussed with the local science instructor and several salesmen for scientific supplies, and it was finally concluded that a practical moisture-testing apparatus could be set up with the ordinary chemistry laboratory equipment plus a Bidwell-Sterling receiving tube. This was purchased for $1.25; and a Lebig condenser 250cc flask, 250° Centigrade thermometer, bunsen burner, ringstand, two clamps, rubber stoppers, and some rubber tubing were borrowed from the science department. One quart of good grade motor oil was purchased and we were ready to venture on our experiment. Ten grams of shelled corn were used and covered in the flask with oil. This was then heated to 160° Centigrade. The water vapor was condensed by the Lebig condenser and dropped

(Continued on page 57)

Supervised Practice

H. H. GIBSON

Project Plans and Their Relation to Instruction

LESTER B. POLLOM, State Supervisor,
Topeka, Kansas

A NUMBER of questions come to mind when one thinks of project plans. Why should a boy write a project plan? What is the justification of requiring a boy to write a plan? Does the writing of a plan serve any definite purpose? If so, what is the purpose? Do the benefits derived from the writing of a plan justify the time and effort required of both teacher and pupil? What constitutes a satisfactory plan? How much studying might a boy be expected to do before beginning to write his plan or as he writes it? Or will we permit him to write his plan only in the light of previous experience and observation?

The purpose of this discussion is not to attempt to answer the foregoing questions, but rather to discuss some aspects of them and perhaps occasionally express an opinion. Probably each question is worthy of some consideration as we attack the annual job of preparing project plans. Some teachers report little or no difficulty in securing satisfactory project plans from their boys, while others seem unable to secure plans worthy of the name.

Perhaps before going further, it would be well for us to remind ourselves of the one big objective of the project which is to serve as a teaching device. While a project is but one of several production units making up a farming program, it nevertheless is an activity which should be planned if it serves its purpose as a teaching device.

The Project as a Tool for Teaching

As a teaching device, the project should function in at least three ways: first, to develop managerial ability; second, to apply technical information; third, to develop manipulative skill. If the project, properly used, is an effective teaching device it would seem that as much of our teaching as possible should center around projects. This means that as much of our day-to-day class instruction as possible should grow out of the immediate and near future needs of boys in their project work.

It has been said that a good manager is one who can first make adequate plans for a business undertaking and successfully carry out these plans. If this is true, it indicates a fairly close relationship existing between the project plan and the extent to which managerial ability is developed thru the project. A written plan for an undertaking of any kind might be defined as evidence of the extent to which the writer has thought thru the undertaking. The degree of thoroness with which the proposition has been thought thru will probably be determined very largely by the extent of knowledge and experience in the light of which the thinking has been done.

Problems and Difficulties Arising From Project

The manager of a business enterprise of any kind, especially a farm enterprise, is likely to be confronted more or less frequently with problems and difficulties. One's success with the enterprise is usually determined by his ability to solve these problems and overcome the difficulties. But a greater degree of success is likely to be enjoyed if in making plans one has foreseen the possible problems and difficulties and taken steps to avoid them. At any rate it becomes obvious that considerable technical information is necessary before a boy understands that problems and difficulties are almost sure to arise. Considerable information is also indispensable if the boy is to set up a plan for avoiding them or meeting them if they arise in spite of his efforts to avoid them.

If a boy is permitted to write a project plan based on his previous experience and observation only, there seems to be little reason for his writing it. He has only recorded some observations he has made and has not necessarily acquired any new information about the enterprise. Such a plan would probably be so incomplete and inadequate that to carry it out completely might call for little or no acquisition of additional technical knowledge or manipulative skill, much less real managerial ability. Plans of this type have been observed which usually run somewhat as follows: "I plan to purchase a purebred Duroc gilt and breed her to a purebred boar. I plan to have her farrow about March 1. The pigs will be weaned at six weeks of age. I plan to feed the pigs corn and tankage and pasture them on alfalfa. I expect to show one or two of the best boars and gilts of the litter at the local fair and hope to sell them for breeding purposes. I will keep one or two good gilts and sell the balance of the litter to the packer. I will probably sell them when they weigh about 225 pounds, etc."

What Constitutes a Satisfactory Plan

There is probably little in such a plan which the boy could not have written even before he finished the country school. If such a plan is inadequate and unsatisfactory, what constitutes an acceptable plan, for instance, for a swine production project? In attempting to discuss such a question, it seems necessary to raise another. What are the big factors which have to do with success in swine production? This brings to mind such things as conditions under which hogs can be raised successfully, selection of breed, selection of breeding stock, size of litters, comfortable and sanitary housing, economical feeding, prevention of disease, control of internal and external parasites, proper exercise, determining when and how to market, etc.

It is unlikely that the average boy will appreciate the importance of these factors unless his previous experience and observation are augmented by considerable study of the swine enterprise. However, he probably will not be able to treat these factors intelligently in his plan unless he knows how and why they affect ultimate success.

Relation of Plan to Effective Teaching

The project has probably lost some of its teaching value if the boy selects his stock before a thoro study of desirable points in breeding or feeding stock and field practice in judging. He should understand why a certain type is desirable. The same thing might be said of choosing the sire. It seems reasonable that his plans should show that he is informed as to what to look for and why.

It is generally conceded that the size of the litter has much to do with determining profits in hog production. The boy should understand that a litter of four pigs costs as much at birth as a litter of eight. There seems to be no question that certain methods of feeding and management are not only conducive to larger litters but more healthy litters as well. It seems reasonable that the boy thru his study should not only know what methods of feeding and management of the brood sow are conducive to large healthy litters, but why such methods result in larger and healthier litters. If his study enables him to understand such things, there seems to be no reason why his plan should not show how he expects to utilize his knowledge in the management of his project.

No one questions the importance of clean, dry, well-ventilated, sunny housing for young pigs. There are scientific reasons why such housing is essential to the greatest possible success. On the other hand, numerous ailments can be traced to unsatisfactory housing. It does not seem to be beyond the boy of high-school age, thru both his observation and study, to appreciate the importance of proper housing, to know what diseases and ailments are likely to arise from poor housing and why poor housing is conducive to these difficulties. If he understands these things he should show in his plan how he plans to house his project and why. His written plan might indicate what difficulties he hopes to avoid by his housing plan; yet it might not be out of order to ask him to state, in his plan, how he expects to treat such ailments in case they arise, in spite of his efforts to avoid them.

Before a boy can intelligently plan a suitable ration for a pregnant sow or a litter of growing pigs, it seems that he should have a working knowledge of animal nutrition and feeding values of the various feeds, especially those which, because of their availability, he plans to use in growing his swine project. It does not seem unreasonable to expect a swine project plan to show a working knowledge of feeds and animal nutrition. Unless a boy knows why some feeds are desirable, others not, unless thru his study he knows what difficulties are likely to arise from improper feeding, it is doubtful if he is yet ready actually to begin that stage of a project. Surely the project is not measuring up to its possibilities as a teaching device if it falls short of this. It is possible this information may have been previously acquired thru the study of some other enterprise. Regardless of when it is acquired, the plan should show that it has been acquired and how it will be utilized in carrying on the project.

Farrowing time is usually a critical time in the swine production cycle. A complete plan might show definitely how the sow would be fed, housed and managed at this time and why, pointing out some of the difficulties which might arise from improper feed, housing, and management.

Knowledge of conditions conducive to internal parasites should be apparent in a swine project plan along with a statement as to how the boy hopes to avoid this difficulty, and also how he expects to handle the situation in case the parasites occur. It seems essential that the boy should know the symptoms of internal parasites. The discussion of internal parasites may in a general way suffice for external parasites.

All Project Plans Involve Same Fundamental Principles

It has not been the purpose of this discussion to attempt to enumerate all the major factors having to do with success in the swine production enterprise. Neither has any attempt been made to break these factors up into subfactors, as a thoro, detailed project plan might do. Rather an attempt has been made to outline in a general way some of the fundamental principles which seemingly should be observed in writing plans for any kind of project, whether livestock or crop.

If such a method were followed, it becomes apparent that not a small part of the teaching thru the project, at least a great part of the acquisition of technical information, will be done as the plan is being developed. The supervisory and teaching visits which the teacher will make to the projects will be largely for guiding and directing the boy in executing his plan, with perhaps an occasional review of subject matter to make sure it has not been forgotten and that it is functioning on the job.

Some Other Questions

At this point such questions might logically arise as: When shall the boy write his project plan? Should he complete his plan before he begins its execution? Should the plan be written on school time and considered one of the problems of the vocational half day? Or, should the boy develop his plans outside of school hours? What relationship will the writing of the project plans bear to the day-to-day instruction? How will the writing of the plan figure in the daily, weekly, monthly, and yearly teaching plan?

It seems unreasonable to expect a first-year boy in high school, or even a more advanced pupil, to be able to study and think entirely thru a farm enterprise to the extent of being able to set up a comprehensive plan for that enterprise before any steps looking to its execution are taken. It does seem reasonable, however, to believe that a boy should be able to set up early in the school year a skeleton outline of his project enterprise which at least shows the important headings under which his study will be made. This incidentally will be the most important factor having to do with economic production.

Project Teaching in Season

Experienced teachers recognize the importance of teaching the various jobs of any enterprise in season. It is quite generally recognized that castrating pigs must be taught when there are pigs to castrate. Or castrating and docking of lambs must be taught when there are lambs to be castrated and docked. Field selection of seed should be taught when the seed is ready to select and seed treatment for control of disease should be taught as seed is being prepared for planting. Care of farrowing sows to be taught effectively must be taught when sows are farrowing. Control of chinch bugs should be taught when there are chinch bugs to control, etc. Experienced teachers recognize the fact that when such jobs are taught out of season the teaching becomes very largely a matter of mere information "about" the subject, rather than a matter of boys acquiring managerial and manipulative skill by affording them an opportunity to make vocational applications of the subject matter. Such teaching carries a questionable value.

The effectiveness of the project as a teaching device will be determined very largely by the extent to which the subject matter relative to the various stages of the project is presented, parallel to or immediately preceding the time when that stage is reached in the execution of the project plan.

A teacher has six boys of a class of 14 who have chosen corn projects in a region where October or early November is the proper time for field selection and storage of seed corn and where fall plowing is advocated as the best method of seedbed preparation. What bearing will this situation have on his general teaching plan and the development of project plans?

Advantages of Early Selection of Projects

The advantage of early selection of projects becomes apparent. Some teachers seem to feel no need of selection of spring crop projects until well toward spring. If this practice is followed, there seems to be no way in which the teaching between September and March can be tied up with anything definite in the way of projects. Boys sometimes flounder thru a mass of information relative to crop production during the school year only to find, upon selection of a project in the spring, that they are obliged to "rehash" most of such content in order to salvage and reassemble enough of the subject matter to construct a project plan. A plan developed at this stage of the year's work can hardly be expected to have more than minimum teaching value, since only a small portion of the year's work can be centered around it. There is little to motivate the boy's interest in plan-writing at this time since, so far as he is concerned, it becomes largely a task of reviewing and recording information passed over weeks, even months previous. Naturally the boy is inclined to feel the plan serves no useful purpose. Rather it merely meets a formal requirement of the teacher. It seems, if projects are to approach their teaching possibilities, it is important that they be chosen when the greater part of the year's work is still before us.

Surely the project can serve no big purpose in the year's work if it is not chosen until the school year is well spent.

Project Plans and Their Relation to the Teaching Program

Returning to the assumed situation where a half dozen boys of the class have chosen corn-production projects during the first month of school, the latter part of September or early October will probably find the class busy with classroom, laboratory, and field-trip study of desirable types of seed corn. If the teacher is using good psychology in his teaching, the class will be making such a study very largely for the reason that several of its members are actually confronted with the problem of selecting and storing desirable seed for corn projects which they will grow the following summer.

While such a study is being made, the six boys with corn projects are developing and writing that part of the plan which has to do with selection and storage of seed corn. In a brief way the plan might be expected to show that the boy has a desirable type in mind and his reasons for selecting that particular variety and type. It might also indicate that the boy understands the reasons for field selection and storage of seed corn, what difficulties he hopes to avoid, and what advantage he expects to gain thru such a procedure.

Such a study of corn might be immediately followed, or even paralleled, with a similar study of sorghums in the interests of other boys of the class who have chosen sorghum projects. If we were to assume such a study being made in a region where fall plowing for corn is advisable, the study of seedbed preparation for corn or both corn and sorghums might logically follow. Again, for psychological reasons, the study is made in the interests of the boys who have chosen projects calling for fall preparation of seedbed. During this study such boys make a start toward developing that part of the project plan which has to do with seedbed preparation.

Project Study Carries Thru School Year

It is hardly to be expected that a thoro knowledge of soils will be acquired at this time. It seems logical to

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V. G. MARTIN

Farmer Classes

J. B. McCLELLAND

Teaching Agriculture—After Hours

JOHN W. GOODMAN, Instructor,
Minotola, New Jersey

THE day's work over on our Atlantic County (New Jersey) farms, a large number of the poultrymen, sweet potato-, fruit-, and produce-growers give things a final checkup and get ready for the evening class in agriculture. Some of the members may have time to change clothes while others who have worked up to the last minute come as they are; but regardless of dress or fixing up, they all attend with similar ideas—getting information on their particular lines of farming, discussing new and approved methods, marketing, prices, approved credit and, last but not least, sociability. Yes, there is generally a chance after the regular class meeting for just plain swapping of experiences, mostly relating to the topic of the meeting, but often just plain sociable talk.

Classes in our agricultural subjects are not held too frequently but are spaced at intervals of two weeks during the fall, winter, and early spring period. It would certainly be too much to expect farmers to work all day and then stay well into the night for frequent class meetings. The instructor would also find it rather difficult to handle short interval classes in addition to supervision when such work is carried on in four different centers.

The main purpose behind these evening classes in the types of agriculture of our section is to combine the theoretical and the practical, but to stress the latter and make use of theory only insofar as it can be safely and profitably applied to the local farming operations. In other words, the use of proved and progressive experimental results has a very definite place in our evening-class program, while actual experimenting is left largely to our state experiment station and related agencies. After all, the practical farmer of Atlantic County is taking interest in the classes because he is anxious to improve his methods and in every way possible make the farm operations into a more profitable enterprise.

Instruction in the evening classes is naturally on a group basis but the aim is to bring out individual questions and problems, deal with phases of the work which are in season, and follow up the group instruction with individual supervision, on the class member's own farm. It is only natural that a poultryman, sweet-potato-grower, or fruit-grower will more readily go into detail about his farm operations, misfortunes, mistakes and plans in direct conversation than in a group meeting; consequently the farm supervision is a very important, practical part of the whole evening-class program.

The problem in our agricultural instruction work lies principally in analyzing numerous individual farm businesses in each of the different centers and determining the common weaknesses and difficulties which result in less profitable farming. As an example, we consider commercial egg production as carried on by the average poultryman of the area. Too often the whole farm program is in a precarious position because of poor stock, disease, poorly planned management, improper housing, and other causes of unnecessary losses. Very naturally the problem of the instructor in evening-class work is to develop an interest in better methods of practical farming and tieing up such methods directly with the plain dollars and cents angle of the business, whether it applies to the immediate future or really shows the full return as the result of a carefully planned, long-time improvement program. After all, one of the most vulnerable points of each of us is the bankbook, or at least the place where said bankbook should be. Also along the line of developing interest in the problem of better and more profitable methods is the natural tendency of the farmer to prefer running a successful program, not only from the profit standpoint but in seeing his endeavor rewarded with a fine field of sweet potatoes, a high percentage of promising pullets, or a heavy set of clear, well-grown fruit —let's call it professional pride.

The Atlantic County section covered by my own evening classes includes the well-known Minotola East Vineland sweet potato producing area and the large poultry tracts of Richland, Milmay, Dorothy, and Risley, on the outskirts of Vineland. Minotola and Landisville also produce thousands of bushels of cucumber pickles, and peppers, while in East Vineland the peach crop runs second to the sweets. The bulk of the sweet potatoes, pickles, and peppers go into the New York market either directly from the farm or thru the medium of the Landisville Produce Auction, one of the original New Jersey auction markets. Eggs from our section also find their way into the New York City markets thru such agencies as the Quality Egg Club and the Vineland Egg Auction. This latter named co-operative egg marketing organization very recently (March 12) dedicated its new and modern building to the work of distributing thousands of cases of South Jersey eggs to both wholesale and retail outlets not only in New York City but also Philadelphia, Atlantic City, and smaller centers.

It is along lines of grading and marketing for better returns, as well as in the production end of the business that our evening classes endeavor to focus attention on more efficient and profitable methods.

As mentioned earlier in this article, the class work is carried on at four centers: Minotola, East Vineland, Richland, and Risley, the former two dealing entirely with vegetables and fruit while the latter two specialize in poultry. At each of the four centers a program of ten lessons is arranged for the fall and winter period in addition to any special trips or outside demonstrations that may be planned for the members. This series of ten lessons carries well into the month of April when the regular spring rush of work makes the farmer's day very full. Evening class meetings are held in two schools, a fire hall, and at our own vocational school. In all cases boards of education and the fire company have been very willing to cooperate to the fullest extent in carrying out the program.

Lesson material for our evening classes does consist very largely of the outlining and application of improved practices in the particular enterprise being covered. A crops course, dealing very largely with sweet potatoes, is designed to cover such phases as price study of field-sold and storage stock; production and market movements of other sweet potato states; storage practices; fertilization; seed selection, treatment and bedding; planting; cultivating; and harvesting. One or two meetings of the course are given over to a general outlining and discussion of up-to-date methods for the production of at least one other crop important to the area. Handling a sweet potato course in the manner outlined above does not mean that each separate subject listed is covered in its entirety, as that would be absolutely impossible in the time allowed. Old and tried practices which are being followed successfully by a majority of the growers are brought into the class program when some important points are to be emphasized or special practices outlined again in detail. Stem splitting for stem rot control is an approved practice that has helped materially in cutting that disease down to a minimum on some of our farms. However, because of the labor involved, there are cases where stem splitting is not followed, even tho there is considerable loss from the rot. The practices of stem splitting, careful seed selection, and seed treatment before bedding have such an important bearing on the ultimate success of the average sweet potato enterprise that special emphasis is placed on them, even tho not new ideas. However, the main objectives of the course in question are to bring out newer improved practices, to keep members posted on research work of our own and other states, and to bring out individual experiences of farmers, both within and outside the group. Comparison between field-sold and storage stocks and the relative profits of each have been brought out clearly to members by the use of a rapid calculation chart made up for the purpose. In short, the plan of the Atlantic County vocational school evening classes is to take guesswork out of the farming of the members insofar as possible by presenting tried and progressive practices and in endeavoring to develop and maintain interest in such a program. Occasional trips and demonstrations play a definite part in development of such interest and support of the whole project.

Again, a very important part of the evening-school program is the farm supervision following up the class work. A part of such supervision is in direct response to requests by class members either at regular meetings or between times. In addition to direct requests the instructor calls on class members on schedule for the purpose of discussing problems and practices in detail. Very often such a scheduled call during chick-brooding or plant-propagation season occurs at just the time when the member has an urgent matter he wants to discuss privately. An important phase of the farm supervision, beside the discussion of problems and plans of the operator, is the encouragement to carry out approved practices outlined and discussed in regular class meetings.

Evening-class instruction, such as carried on with the farmers of Atlantic County, aims to present to the members latest information on new approved methods and a reviewing of the outstanding features of the old and time-tested practices thru experiences of successful farmers of our area, the reports of the experiment stations of our own and other states, selected commercial information, co-operation of the state extension service, and the personal experiences of the instructor in both state and commercial work. The ultimate measure of the success of the whole program must be calculated by means of the average level of progress and efficiency attained by farmer members of our evening classes.

Evening-School Program for Buttston Community

A. L. MORRISON, Teacher,
Camp Hill, Alabama

IN LOOKING over the Camp Hill school patronage area to decide where the most good could be accomplished in evening-school work, I found that the Buttston community had been badly neglected so far as vocational agriculture or any other type of agriculture was concerned. I realized that the evening schools should be conducted at two centers, Sandy Creek and Pine Grove.

The Buttston community is located 15 miles from Camp Hill. Here a chance prevailed to do some real vocational work. Early in the year several of the outstanding citizens were contacted to explain to them the need and possibilities of vocational work thru an evening school in their community. A public meeting was called at the church to get the reaction of all the farmers. They eagerly responded when the purpose of the school was explained. The school was then organized and each farmer was asked to be ready to present his farm problems at the next meeting. Meetings were to be held once a week.

Before the second meeting I made two more trips to this community to contact the farmers and to study their problems more closely. As a result of these visits and other information I could secure, the following objectives were set up as a basis for accomplishment during the year:

1. Bring about better living conditions on the farm.
2. Help the farmers to get the most out of the soil conservation program.
3. Build up the soil.
4. Extend the one variety cotton improvement association into that section.
5. Secure money at a cheaper interest.
6. Organize the farmers into a local farm organization.

At the next meeting the farmers had increased their number to 25 men and each presented his various problems to be discussed. These problems were listed on the board as the farmers presented them. Afterwards they were worked into lessons with plans for each lesson, which are as follows:

Mr. Clanton running terraces

Jobs and Number of Lessons

1. Organization——————— 1
   Meeting advertised thru key men and cards mailed to every farmer in community. Selected farm problems to consider in course. Meeting dates decided.
2. Planning Farm business————3
   Presented outlook on cotton and general farming. Details of soil conservation program. Each individual made plan for 1937 in light of outlook and soil conservation program.
3. Securing farm credit————1
   In planning farm business, a need for cheaper credit arose. A representative discussed details of Production Credit Association.
4. Planting winter Legumes————3
   Alabama experimental data was studied. Planting and inoculation methods studied. Turning and determining nitrogen content to be given in spring.
5. Planting oats and vetch for winter Hay ————————2
   Developed need due to drought and short feed crop. Possible winter hays studied, and oats and vetch selected on basis of experimental data and experience of farmers in group.
6. Selecting varieties of cotton and corn ————————2
   Experimental data studied. Advantage of one variety group with long staple discussed by local buyer. Experience of Sandy Creek community. Group selected Stoneville 5 and also decided to adopt Whatley's Prolific Corn.
7. Securing fence posts ————————1
   Local practices discussed and methods of securing and planting Black Locust seedlings.
8. Determining fertilizers to use on farm ————————2
   Experiment station data and experiences of group discussed. Fertilizer needs for different crops. Home mixing versus ready mixed goods.
9. Renovating orchards and setting new trees ————————2
   Discussion of pruning, spraying, fertilizing, and setting trees. Demonstration of pruning, spraying, and setting.
10. Pastures as a source of cheap feed–2
    Situation in community. Planning pastures to fit into farming program. Details of putting idle land into Lespedeza and Bermuda.
11. Social ————————1
    One meeting devoted to oyster supper, music, and entertainment.

After the evening school was in full swing and much interest shown, the ladies decided that they wanted a similar school to help with their home problems. Miss Ruth Dunn, the home economics teacher, made the next trip with me to organize the ladies. They now hold their meetings at the same time as the men. A joint social is held for 30 minutes at the beginning of each meeting, the men entertaining one meeting and the ladies the next. Music, stunts, and games that fit into the community life are played.

Mr. Clanton seeding oats and Vetch

Each man enrolled was visited soon after the course of study was outlined, and improved practices were set up in connection with the jobs taught as a basis for supervised farm practice. To give a better idea as to what type of practice was set up, one of the evening school member's improved practices are listed below.

Supervised Practice Plan for L. L. Clanton:

1. Inoculated seed, fertilized and planted 16 acres Austrian Peas. To be turned in spring and followed by corn.
2. Three acres oats and vetch sowed as winter hay crop.
3. Is planning to arrange to finance farming operations thru Production Credit Bank, Auburn, Alabama, at 5 percent for time money is actually in use. Has been paying 8 percent on yearly basis and using money about five months.
4. Changing variety of cotton to Stoneville No. 5 on 20 acres. This is in co-operation with the "one variety cotton community" organized at Buttston.
5. Planning to put out one acre in Black Locust seedlings to grow a supply for fence posts for farm.
6. Experiment station recommendations to be followed in fertilizing entire farm.

7. Two acres of improved pasture to be seeded to Lespedeza and carpet grass.

8. To renovate home orchard, prune, spray, and set out 30 additional trees.

The 25 men enrolled to do improved practices, similar to the above, are making every effort to carry them out according to agreement. The community is now organized into a local farm bureau and is holding its monthly meetings in addition to the regular evening-school work to have various problems of interest discussed.

History of Savannah Community Meetings

W. G. WADE, Instructor,
Savannah, Missouri

DURING the past six years we have held seven farmers' meetings. The first one was not limited and our enrollment and attendance increased with each lesson. By the time we had taught two lessons our enrollment had increased to the place where it was so crowded we could not do shop work and closed the evening school.

The following Monday we opened another school which was held in the agriculture room in the high-school building. We called this meeting "Farmers' Mechanics." Our attendance grew thruout the course and our largest attendance during that year was 90.

The next year, we opened our first school the first Monday in January and from that time on we have started our schools on the first Monday night in January and have met every Monday night unless the temperature was below zero or the roads impassable. It is surprising how neighbors will get together and get up a load on a very cold night. We have always found that the type of lesson does not have a great deal to do with our attendance but the weather determines whether we have 50 or 200. In the severe winter our attendance dropped considerably; but when spring came, for our last five lessons we had an attendance of 200, 250, 146, 242, and 263.

Another year we tried to give the farmers what they wanted and they chose topics on livestock and crops. We prepared a list of subjects by farmers' enterprises, numbering about 200 subjects. Each Monday they would choose from this list about five subjects. The titles of these topics were placed on the blackboard and an explanation given of each subject. After this they voted on their favorite topic. The one receiving the highest number of votes would be the one for discussion at the next meeting.

In addition to our discussions, they had a purchase and sales department, where they would list what they had for sale and what they wanted to buy. They traded among themselves from the list on the bulletin board. Our attendance grew that year, and our largest meeting was 108.

The next year we continued on the same plan and elected an executive committee of five members for the transaction of such business as comes before an evening school. We conducted out meetings in the same manner and our attendance was steadily increasing, which was making it difficult to prepare the type of lecture that was the best with only a week's preparation. So the next year, 1936, our executive committee met and chose the topics for the whole series before the meetings started. This seemed to be very satisfactory and we have followed this method ever since. In this method there are many advantages for it gives us time to secure additional material, such as bulletins and pictures, and enables us to prepare a lecture of much better quality.

The county court purchased for us a film strip projector and enough films for the year's topics. So in addition to the lectures we had one or two film strips on the subject for the evening. In addition to this we have always added moving pictures. We have always tried to show those that were educational and along the same line as our discussion.

In 1937 we started as we had in the past years with an increasing attendance. This year our attendance reached a total of 1,300 with an average of 130, and 498 different persons attended the ten lessons. This gave us a new problem of handling our attendance. Our classroom is too small for our attendance and we were forced to have most of our meetings in the study hall or in the auditorium. Meeting outside the classroom is not so desirable, because it takes you away from all of your reference material and the blackboard. This year we tried to divide our people into groups. With the assistance of our Future Farmer boys, we were rather successful along this line. We divided them into three groups. An educational program for the young farmers was given by one of the F. F. A. boys. At the same time the lecture was given as usual to the more adult groups, and after these two sessions they assembled in the auditorium for the main part of the program.

During the past six years we have encountered much bad weather, mostly because of the time of year that we have been meeting. On planning for the next school we will try to have half of the lectures in the fall, skip January and February, and finish in March and April. We do not know how it will work but we are going to try it. Our program of attendance seems to be our biggest problem. The following is a record of our evening school for the past six years: the total attendance in 1932, 117; in 1933, 594; in 1934, 986; in 1935, 798; in 1936, 849; and in 1937, 1,300.

A number of times we have brought in a number of outside programs. Farmers like a variety of programs. We found outside ones to be very valuable and the farmers have shown great interest in them. It is rather hard to get a subject that will be of interest to everyone and to farmers of different ages. We have always tried to have our programs in two or three divisions so part of them will be of interest to everyone. Our meetings have been rather lengthy. We usually meet at 7:30 and stay in session till 11 or 11:30. Our programs have been the lecture type. At the close of each meeting we devote a period of the time to asking and answering problems that deal with the evening's discussion and also, some time after the discussion, to any farmers' problems, regardless of their nature. Then we have our pictures, after which we transact any business that is necessary, and then adjourn, with a few remaining for special problems that will interest only such individuals and not a whole group.

We have kept a careful record of all our meetings and we have a record of all our topics, the persons attending, and the number of times each person attended. Each Monday we publish the names of those who attended the meeting the preceding Monday, and also give a list of those who attended the last meeting.

Why Evening Classes?

NEILL LEFORS, Instructor,
Checotah, Oklahoma

AFTER having conducted one to four evening classes each year for the past six years, I am fully convinced the holding of evening schools is one of the most valuable contributions a vocational teacher can make to his community. It puts the agriculture teacher in touch with a large number of farmers and gives them a personal acquaintance that he probably would otherwise never have made. These contacts increase the number of supporters for the department.

The new vocational agriculture teacher need not hesitate, and the older instructor who has not been holding evening classes should not hold back. The teacher, whether young or old, with experience in the teaching field or without experience, may hold evening classes successfully provided that:

1. The content of the instructions is based on the specific need of those persons attending the class. If there is no real problem to be solved the farmers will not respond.

2. The teacher is acquainted with the problems and the people affected by the problems in that community.

3. The teacher has the ability to get all the available functional facts about the problem, and analyze and organize them in such a manner that the members of his group may make comparisons and contrasts of these facts as a basis for discussions and making decisions.

4. The teacher is able to use the experiences of the group in guiding its thinking about the problems in hand.

5. The instruction is followed up with a supervised practice program.

In deciding the problem and developing interest I have found the following to be the most effective: Talk with a few men, then make a tentative list of most of the men who should attend the evening school. The next step is to call at the farm of each man on the list to get acquainted with him; if you are already acquainted, he will be glad to have you come to see him. Explain your plan for the school and invite him to attend the meeting. While visiting, if the right kind of contact is made, the teacher can find out a few facts about conditions and practices on each farm and learn what some of the men's problems and interests are. This will show the teacher's interest in farm problems and help to enlist the farmer's interest in helping the teacher do his job. This procedure takes time and effort but if properly done it has more to do with the success of the evening school than any one thing I can list, for there is not any good substitute for the practice of visiting the farmer in his own backyard when it comes to discovering the farmer's problems and developing interest.

Before the school starts, outline the units of the course into the different jobs and problems and be thoroly familiar with the contents of the course. In doing this the instructor can anticipate a number of questions which will be asked. I always try to get as much information as I can, have charts made and references ready to answer technical questions.

When the meeting starts the teacher will need to lead the discussion by offering a number of suggestions or statements to get the minds working in a general direction. Then when the members of the class begin to respond freely the teacher should remember he is the leader and must keep the discussion going in the right direction, because the conference method is the better method of conducting most evening schools. A few helpful hints in conducting the meeting are:

1. The work should be easily understood.
2. Let the members of the class do the talking.
3. Watch your time.
4. Keep the class on the topic.
5. Call on individual members for an opinion.
6. Do not let a few do all the talking.
7. Use tact and judgement in showing a fellow he is not altogether correct.
8. Be sociable.
9. Do not allow the meeting to drag.
10. Have confidence in your own ability.

In the supervised practice work, again I say the most interest and the best practices can be developed by the teacher's visiting the farmer on the job. It is here that the teacher can do his greatest and most effective service in carrying to completion those desired changes in practices brought out and summarized in the evening class. Farmers are quiet after being confronted with the lack of skill, or they are in doubt as to how to go about putting the new practice into operation. At this time the teacher serves the same purpose as the old sayings, "When conditions are right it only takes a small shove to start a mountain slide," or "The lighting of a match in dry grass may start a great fire." By being on hand to help the farmer carry to completion those practices which he helped him see, understand, and agree upon in the conference group meeting, the teacher may start practices that will grow and spread, resulting in great benefits for the community.

A second means of securing the supervised practice is to make a tour. Take the members to farms where new practices of the correct type are being used.

I remember very well a successful supervised practice program that resulted from an evening class held at the Garden Grove school the second year I taught. During the time the class was going on and after it closed, every member was visited from one to three times. A tour, arranged at the last meeting of the class, carried us thru the Bethel and Vanzort communities where farmers were using the desired practices as a result of evening classes held in those communities the last year. Results derived from the class could not be measured in one year for the tour and visits extended over a number of years. Each year more farmers see the benefits their neighbors are deriving from the practices and in this manner the practices continue to grow and spread for a long period of time. In the Garden Grove community the following results were obtained over a period of three years: 1,180 acres terraced, 560 acres of legumes, 620 acres of winter cover crops, 405 acres of green manures, no more stalks and grass burnt, barnyard manure conserved and put on fields needing it.

In conclusion let me say I do not think a vocational agriculture teacher can be too well acquainted with the farmers in the communities around his school. If the farmers are well acquainted with you they will feel more like consulting you, you will understand them better and can feel at ease in offering suggestions for improvement practices to them.

Community Guidance Thru the Community Survey

OTTO W. PINO, Teacher,
Zeeland, Michigan

ZEELAND is a city of 3,000 Holland Dutch people whose living comes largely from manufacturing of furniture, clocks, and caskets, and from the 16 chicken hatcheries. It is surrounded by 160 square miles of fertile land divided into 1,435 farms with an average size of 63 acres, 87 percent of which are occupied by farm owners whose families are large.

Two years ago the members of the agricultural economics class made a survey of the area in order to become more thoroly acquainted with their home area, and to determine what enterprises and practices needed further study. Merchants were interviewed to determine the area covered by their usual business so that the study could be limited to our effective trade area. Census data were obtained from the United states Department of Agriculture, and church membership lists were studied. The probate judge and the prosecuting attorney co-operated with information on delinquency. The county agricultural agent supplied information about extension activities.

Several maps were made, each one showing where farmers lived who were engaged in some particular farm practice. For example, one map shows where farm account co-operators live; another shows where U. S. approved poultry farms are located. The other maps are as follows: cow testing; farm organization members; high-school agricultural graduates; 4-H club members; home demonstration members; high-school vocational agriculture boys; and reconstructed dairy barns for quality milk products. These maps made a graphic, visual aid to a quick understanding of these several factors in our rural area and caused the boys to become really concerned and desirous of doing something to improve matters.

A brief discussion of the findings of the survey will show how it points the way to community guidance. Several elements seem distinctly favorable to the community. The Dutch origin of the people indicates stability and conservatism. Tho they are slow to respond, they are loyal to what seems best. They are hard workers and few ever lose their property. With a church membership of 88 percent, delinquency is almost nil. The survey showed that a dairy-poultry type of farming predominated. Due to the hatchery men's activity, 93 farmers have U. S. approved poultry flocks.

In contrast with these fundamentally favorable factors, the survey revealed a very small farm organization membership and an equally small following of extension programs. Night schools in this vocational agriculture department have an average attendance record of only 10. This area was like an island on which 4-H Club work could get no footing. All of these reactions were natural to the Dutch loyalty to the church and to their attachment to established farm practices. A long, approved, local leadership seemed necessary to gain an appreciable following. The dairy herd improvement association numbered seven members and the co-operative farm-accounting group nine members. There were few purebred bulls. Alfalfa averaged only two acres per farm. In keeping with this situation it was found that this county led all Michigan counties in purchase of feed and was sixth in the use of fertilizer. Coupled with all these unfavorable elements was one that seemed significant. In comparison with a state average of 78 percent of the young people going to high school, only 45 percent of the young people in this area were attending high school.

How to get these facts before the people became the concern of the teacher of agriculture during the year following the survey. The local publisher ran some of the stories and the local Rotary Club listened and included in its program what assistance it could give. Parent-Teacher associations called for presentations. The county agricultural agent, in developing his 4-H Club program, asked representatives of luncheon clubs, chambers of commerce, banks, fertilizer concerns and a beet sugar company to listen to the story revealed by the survey. A direct request was made for money to encourage 4-H Club work and $200 were forthcoming. That year 10 clubs were organized with 100 members in this area, all being organized into a federation which met monthly. Teachers' clubs, farm organizations, and home demonstration groups listened intently to the challenge of the community needs. The school board gave full approval to the objectives. Finally a carefully selected group from every community interest was invited to weigh the evidence and determine whither Zeeland trade area should go educationally, socially, and agriculturally. This group recommended directing special emphasis on education thru evening schools and 4-H Clubs; farm accounting; cow testing, poultry improvement, sugar beet contract and advertising. It appointed a committee to help secure enrollment for evening-school attendance.

An evening school was planned offering farm management for January, with farm accounting as an immediate objective. The average attendance was 25. February was devoted to poultry problems with an average attendance of 29. Forty-three attended the March meetings on dairy problems. The last

(Continued on page 58)

Studies and Investigations

C. S. ANDERSON

Difficulties in Conducting Supervised Practice Work

ROLAND BROOKS, Teacher,
Adams, Minnesota

Roland Brooks

UNDER the Federal Vocational Education Act, the the teachers of vocational agriculture in all states and territories perform numerous and varied activities. While the types of agriculture in the various parts of the contry differ, the fundamental principles involved in successfully carrying out the activities of teachers are much the same. This article relates particularly to the relative difficulty encountered by Minnesota agriculture teachers in performing some of the more important activities in directing the supervised practice of their pupils. The data which substantiate the report were gathered by means of a questionnaire replied to by 81.6 percent of the agriculture teachers of the state.

The term, *Supervised practice*, in the study was interpreted to mean any farm practice carried over a period of at least six months, provided it is done under the supervision of the teacher of agriculture and the school, records kept, and a report made.

Supervised practice activities were divided into five phases, viz: selecting, organizing or planning, operating, record-keeping and accounting, and supervising. In Minnesota not much emphasis is placed on the teaching of agriculture on a vocational basis in ninth grade work, such emphasis being in the tenth, eleventh and twelfth grades. For this reason data were gathered separately for the junior and for the senior high schools. The statistical method was used in organizing and analyzing the data. Teacher's work with four groups of pupils was studied, viz: pupils whose parents are owners or farm tenants, those who are life long farmers, or those who entered farming since 1920. The 13 most difficult activities, common to the four groups, for teachers of vocational agriculture to perform with both junior and senior high-school pupils are set forth in Table I.

Table I Difficult Activities in Conducting Supervised Practice

(Order of difficulty indicated by numbers, number 1 being most difficult)

	Junior Group	Senior Group
Selecting home projects of sufficient size or scope to provide opportunity for developing initiative in production methods, managerial responsibility, and a complete natural cycle of activities	5	1
Training pupils to make businesslike estimates of cost factors as well as of probable returns for each enterprise	3	4
Sewing projects that provide new and varied experiences	6	3
Securing from the pupil an accurate project summary. (Usually consists of a financial statement and a cost statement with the chief items given in sufficient detail as to kind, amount, and per-unit value to serve for future reference and comparative study.)	4	7
Training pupils to make satisfactory financial and business arrangements for conducting home projects	1	10
(Same difficulty as one below)		
Securing co-operation of parent in urging pupils to keep their project records up to date	2	9
Securing the collaboration of the parent and the pupil with yourself in forecasting the specific demands of the farming vocation decided upon	11	2
Obtaining complete confidence and counsel with parents in outlining their children's proposed farm practice	9	11
Securing participation of parents in determining how best to secure growth in practice enterprises for next year—during the life of the current program	16	5
Determining limits to which pupil can be led to do detailed planning without interfering with his natural desires for activity in other projects or activities	8	12
Obtaining participation by the parent as a "Substitute" teacher for effective teaching when the teacher is not at hand	13	15
Teaching pupils to figure efficiency factors of their own projects records. (Might consist of having the pupils figure cost per acre, bushel, ton, or pound; the efficiency of labor or production per animal and other similar items.)	17	14
Inducing the pupil's understanding of and conformance to scholastic requirements of supervised practice	14	16

The five other activities for the junior group rated in the following order:

Making proper labor records.... 7
Determining financial returns or labor income per pupil..... 10
Helping pupils to obtain the best possible ownership or share arrangement..... 12
Teaching pupils the meaning, place, and value of a farm practice plan as a guide in working out supervised farm practice enterprises.... 15
Making proper inventory..... 18

In the senior group, four additional activities were rated as follows:

Securing a constant improvement in standards of farm practices within the department..... 6
Securing participation of parents in determining how best to revive interest and enthusiasm after a failure or setback in practice enterprises: how best to develop a finishing "punch"..... 8
Determining what have been the parents' suggestions and criticisms of pupils' work..... 13
Obtaining participation of parent and pupil in determining quantitative standards of proficiency for various projects..... 17

Four of the 13 activities common to both groups, are found to be in the organizing or planning phase, three in the operating phase, three in the record-keeping and accounting phase, two in the selecting phase, and one in the supervising phase. Based on an equal number of activities in each phase, however, the organizing or planning phase, together with the record-keeping and accounting phase, present more difficulties to teachers than do the other phases of supervised practice.

A decline in the number of severe difficulties is reported by teachers as their experience in teaching vocational agriculture extends from one year up to the five-year period, while teachers with five to eight or ten years experience, report an increase in the number of severe difficulties. A consistent decline in the number of severe difficulties is reported by teachers of more than 10 years of experience.

In both the junior and senior high schools, teachers have about the same degree of difficulty in working with pupils of owner and of tenant parents, also the same degree of difficulty in working with pupils of life-long farmer parents and with pupils whose parents entered farming since 1920. There is an indication that, quantitatively, it is more difficult to work with pupils of tenant parents than with pupils of owner parents, also more difficult to work with pupils of lifelong farmer parents than with pupils of parents who entered farming since 1920. This situation also obtains in both the junior and senior high schools.

Teachers may experience certain difficulties by reason of the type of farming found in their localities. Evidence concerning this last point is not conclusive because of the number of variables that entered into the work on which the data were gathered.

The writer desires to call attention to the fact that a considerable number of the activities of the questionnaire (the questionnaire contained 86 activities) was concerned with the teachers' direct dealing with parents of pupils.

Relationships Between Tenure, Professional Training, and Salary of Vocational-Agriculture Instructors

L. O. GUTTING, Instructor,
Maryville, Missouri

L. O. Gutting

WHAT relationships exist between tenure, professional training, and the salaries of vocational agriculture instructors in Missouri? Do teachers with longer tenure receive proportionally higher salaries? Are salaries received in proportion to the degree of professionalization of teachers? What is the range in salaries of vocational agriculture teachers? How are these salaries affected by existing price levels? These and a score of other questions prompted me to make this study of salaries of vocational agriculture instructors in Missouri.

This study was carried out in the summer of 1937 under the direction of Dr. Sherman Dickinson, Professor of Agricultural Education at the University of Missouri. The study covered 150 instructors of vocational agriculture in Missouri as of July 1, 1937. The two instructors of negro departments were not included as it was felt their cases would not be representative of the instructors as a whole. Salaries of teachers while teaching outside of Missouri were not included as it was desired to determine conditions representative of Missouri. The study covered a 20-year period from 1917 to 1937.

The degree of professionalization was secured from the registrar of the University of Missouri. Only graduate credit as applying towards an advanced degree was considered, as all instructors of vocational agriculture in Missouri had a bachelor's degree. The salary and tenure data were secured from the visitation reports of the state supervisor of agricultural education.

These data for each instructor were compiled and sent to him for his verification, correction of possible errors, and for additional information that could not be secured from the above named sources. This method of procedure was followed in order to relieve the instructors of as much detail as possible, secure maximum accuracy, and simplify the filling out of the questionnaires.

Some very interesting facts and correlations were discovered, a summary of which follows:

1. Professional Training
   a. Vocational agriculture instructors of Missouri are, as a whole, a relatively highly trained group.
   b. All instructors of vocational agriculture in Missouri have a bachelor's degree.
   c. 88.7 precent had two or more hours of graduate credit.
   d. The average amount of graduate credit for the 133 instructors with graduate credit was 17.6 hours.
   e. The average for all vocational agriculture instructors in Missouri was 15.6 graduate credit hours.
   f. Thirty, or 20 percent of all instructors, had masters' degrees.
   g. Eleven more, or 7.33 percent, had from 25 to 32 hours of graduate credit.
   h. Fourteen more, or 9.33 percent, had from 17 to 24 hours of graduate credit.
   i. Twenty-two more, or 14.66 percent, had from 9 to 16 hours of graduate credit.
   j. Eighteen instructors had graduate credit in excess of requirements of masters' degrees.
   k. The average cost to instructors for graduate credit received was found to be $24.13 per credit hour.
2. Relationship of Professional Training and Salary
   a. In general, salaries were found to be in proportion to the degree of professionalization of the instructors except that salaries of instructors with masters' degrees averaged somewhat lower than salaries of instructors with from 25 to 32 hours of graduate credit.
   b. Salaries of instructors with 17 or more hours of graduate credit averaged considerably higher than those of instructors with 16 or less hours of graduate credit.
   c. Salaries of instructors with from 0 to 16 hours of graduate credit experienced a greater decline during the depression than did salaries of instructors with 17 or more hours of graduate credit.
3. Tenure and Salary
   a. Vocational agriculture instructors in Missouri have a relatively long tenure.
   b. 45.3 per cent of the 150 instructors were at the same location in which they started teaching vocational agriculture in Missouri.
   c. The average tenure for all instructors was found to be 5.7 years.
   d. A direct relationship was found to exist between tenure and salary, the longer the tenure the higher the salary as a rule.
   e. Salaries of instructors with a tenure of 16 or more years were found to average as much as $350 higher as compared with those of the one-year tenure group.
   f. Salaries of instructors in the one-year tenure group experienced a more drastic decline during the depression than did salaries of instructors with longer tenure. They also made a more rapid recovery of their losses.
4. Relationship of Total Experience and Salary
   a. The average total experience of vocational agriculture instructors in Missouri was found to be 8.4 years.
   b. Ten percent of the 150 instructors had had out-of-state experience as vocational agriculture instructors before taking up the work in Missouri. The average out-of-state experience for these 15 men was 3.4 years.
   c. Salaries were, in general, found to be in direct proportion to the amount of total experience up to the 11- to 15-year point. It was found that salaries did not keep pace with increased experience beyond the 11- to 15-year point and that experience beyond that point had little or no influence on salary.
5. Salaries
   a. There was found to be a wide range in salaries of vocational agriculture instructors in Missouri.
   b. The greatest difference between high and low salaries occurred in 1932–1933, the smallest difference in 1919–1920.
   c. The range in salaries was greatest in the period of low salaries. The extreme lows declined more than the extreme highs.
   d. Salaries of vocational agriculture instructors in Missouri declined 33.87 percent from 1930–1931 to 1933–1934.
   e. Salaries began their decline in 1931–1932, the greatest drop occurring in 1932–1933 and 1933–1934.
   f. During the depression, salaries of vocational agriculture instructors began their decline two and one-half years later than did prices received by farmers for commodities sold. Prices received by farmers fell approximately 20 percent more than salaries of vocational agriculture instructors. Prices received by farmers began to advance one and one-half years ahead of salaries of vocational agriculture instructors. They also advanced more rapidly.

Future Farmers of America

L. R. HUMPHERYS

Call for National Convention

OUR National President, J. Lester Poucher, has issued a call for the Eleventh National Convention of Future Farmers of America to be held in Kansas City, October 17–21. Plans are being made for a very pretentious convention. The usual contests in livestock, dairy, poultry, and meats will be held with improvements on plans and procedures.

TO MEMBERS OF THE FUTURE FARMERS OF AMERICA:

As national president of the Future Farmers of America organization, I am issuing a call for the Eleventh National Convention to be held in the Municipal Auditorium at Kansas City, Missouri, October 17-21, 1938.

Each chartered association, in good standing with the national organization, is entitled to name and send two official delegates from the active membership.

Officers of State, Territorial and Insular Association are requested to provide for official representation and to urge other members and friends to attend. Full and complete attendance will enable us to transact the necessary business and lay plans for still greater accomplishment in the year ahead.

J. Lester Poucher, President,
Largo, Florida, June 1, 1938.

The *Iowa State Association* will furnish the official F. F. A. band consisting of 100 members from chapters distributed thru the State. The Solomon Future Farmer Chapter of Solomon, Kansas, will furnish the orchestra for the banquet. This organization made a marvelous record in entertaining the guests during the banquet at the Ten-Year Celebration. Strickland Gillian, well-known American humorist, of Washington, D. C., will be the main speaker for the annual banquet and will also appear on the program at Tuesday's "Open House" meeting. The public speaking contest will be held as usual on the Monday evening. Headquarters for the convention will be established at the Municipal Auditorium. All F. F. A. films that have been taken during national conventions since 1928 will be shown in connection with the Tuesday's program. Emphasis will be given this year to exhibits from every state and territory. State associations are urged to make the "exhibit feature" a real educational contribution. All exhibits should show characteristic products of local areas. Each state is also encourgaed to exhibit a "Scrapbook" representing activities, accomplishments, and special features of local chapters of Future Farmers and state associations.

National Radio Program

Our national officers are holding to schedule time in the development of the radio program over the National Broadcasting hook-up. The annual theme, "The Farm Community," appeals to people in both rural and urban areas. Much interest is shown by radio audiences in the talent represented and the variety of topics discussed. The subjects for the remaining months will include: "The Community Library"—October 10th; "Community Music"—November 14th; "The Community Christmas Tree"—December 12th.

F. F. A. at Poultry Congress

Tentative plans are being made for the *World's Poultry Congress* at Cleveland, Ohio, in 1939. These plans include poultry exhibits from Future Farmers, poultry judging contests, and other activities. The Future Farmers will have a registration booth to serve as headquarters and a means of directing activities at the Cleveland meeting. A very wide representation will be encouraged from state associations and local chapters.

F. F. A. Camp at Washington

The National F. F. A. officers have been besieged each year, especially during the summer months, for a camp that could be used by Future Farmer chapters visiting the National Capital and its environs. The number of Future Farmers touring this area is increasing year by year. A camp in Washington, D. C. would be a "little university." The national officers realize this need, the opportunity for service, and are making a concerted effort to secure one of the CCC Camps in the vicinity for a National Future Farmers of America Camp. With a Future Farmer Camp near Washington, local chapters will have a place which they can call headquarters.

The cast of "The Happy Family"—radio skit of the Future Farmers of America program, heard regularly on the National Broadcasting Company Farm and Home Hour. Left to right: William Shaffer, "Jack"; Vera Neely, "Mother"; J. A. Linke, "Dad"; Clark Nicholson, "Joe"; Vivian Amidon, "Dot"; and W. A. Ross—director and script writer. Courtesy: Office of Education, Washington, D. C.

High Lights

GEORGIA is making progress with its plans for a "summer camp." Mrs. F. D. Roosevelt recently visited the camp site and had an opportunity to review the proposed program of entertaining Future Farmers in a secluded spot in the State.

Kentucky, Wyoming, Colorado, and other states are working with U. S. Forestry officials looking forward to the selection of camp sites, erection of buildings and detailed plans for summer outings.

District Camp

And now comes Minnesota with a new innovation. District F. F. A. camps are to be located in several parts of the State. These camps are to be used for outings, leadership programs, general programs, and general recreation.

Collegiate Chapter Grows

The Collegiate Chapter of Future Farmers of America of the Virginia Polytechnic Institute was one of the first collegiate chapters to receive a national charter in a teacher-training institution. This chapter recently published and distributed to its members the "MEMORY BOOK" for the year 1937–38. The booklet is dedicated to Edmund Charles Magill, Professor of Agricultural Education, in appreciation of his efficient service. The contents include a short historical sketch of the chapter, a group of photographs showing representative activities and a roster of members of the chapter by classes. This publication is a credit to this Collegiate Chapter.

Ten-Year Inventory

Nebraska, Missouri, West Virginia, and many other states have reviewed the ten years of progress of the Future Farmers of America during the annual state convention. The close of a ten-year period has provided an opportunity for state and local officers to direct the attention of notables, those interested in agriculture and rural youth, to the objectives and the accomplishments of this organization. This is an opportune time for reflection and for an evaluation of the objectives of the organization in terms of what seems to be the present needs of farm boys.

Michigan Celebrates

Michigan had an attendance of 3,100 Future Farmers at its Ten-Year State Convention. Representatives from 200 chapters participated. Fifty-six State Farmers were elected with one Honorary State Farmer.

Film Strips in Teaching Agriculture

(Continued from page 45)

can be cut out and mounted between 2″x2″ glass slides and you can use them in whatever order you wish. You may have some color film strips which can be cut and mounted or you may wish to make or have made slides from negatives Provided the object you wish to have for projection purposes is smaller than 2″x2″, a positive lantern slide can be made by contact printing just like printing pictures and developing them in the same way as paper.

The Screen

The screen is a very important piece of equipment for successful projection of pictures. Even tho it costs as much as the projector it is a wise investment. It should be a good type glass beaded screen. I have made and used screens with white lead, aluminum, starched muslin, tracing cloth, frosted glass and a smooth painted wall. The glass beaded screen surpasses all I have ever used. With this type it is not necessary to have a dark room. In fact I often use the beaded screen, where there are ordinlight shades by drawing the shades and placing the screen with the back to the window, and the projector close to the screen. The result will be that the projected picture will be small, possibly 18 inches by 24 inches, but yet of sufficient size for the ordinary class.

Efficient Use of the Film Strips

As teachers we have the youths to work with. Their minds, just like the bones in their bodies, are in a somewhat plastic form; their thinking is not set along a certain line; they do not have opinions that cannot readily be changed; they respect us as teachers and I believe we are—more than we realize—their heroes, and that they will pattern after us. If we use properly the visual aid material at hand, if we show ourselves as thinkers, as investigators, and as students, we will prove ourselves worthy of our vocation. With visual aids we can possibly do this as much as with any other tool we may use.

In the use of the picture on the screen we should be able to see far more than just a general view or a passing glimpse. Before we present a film to the class or group, we should observe and study it carefully. We should be discussion leaders in that, when a picture is shown, we should lead the pupils to point out the important things we wish them to remember and we should arouse their interest so that they will ask questions about and see things in that picture which possibly we failed to observe.

After the full film has been shown we should give the pupils a list of questions pertaining to the film under discussion. These questions, with the aid of available references, should be carefully and neatly written up in detail by them.

A test that would include 25 or more facts concerning the topic should be given immediately after the discussion of the picture is finished, and this same test should be given after the work has been reviewed. You may object to giving the same test the second time. If that test covers the important facts that should be remembered and you are satisfied that the pupils have them well in mind, you can be well satisfied that you did a good teaching job.

I mentioned a review; by that I mean the next class period when the pupils should have their reports ready to hand in—that is, the answers to the 15 or 20 questions you gave them on the first film. You should show the film a second time as part of the review work, when the pupils should do most of the talking and they should express themselves as to what they see. If their minds have been active you will be surprised as to their interpretation. You will realize that you will be teaching your pupils to observe, to think, and to express themselves.

Corn Moisture Testing

(Continued from page 47)

into the receiving tube which registers up to 5cc by tenths. Each tenth is one percent. The length of time needed to completely evaporate the water was judged by the operator but averaged one-half hour after the heat registered 160 degrees.

The method used may not have been scientifically accurate but it served the need, and more than 40 samples of corn were tested. Local elevator men added their bit by suggesting that corn which contained more than 20 percent moisture could not be safely stored. The public was kept informed thru the local newspaper and I am sure many farmers heeded the good advice this last fall.

Project Plans and Their Relation to Instruction

(Continued from page 49)

say that a study of soil types, soil classifications, soil formation, etc. might be made during the dull winter months when limited opportunity is offered for field instruction. In the meantime, if we assume fall plowing has been done as one step in the execution of the project plan, little is to be accomplished in the way of project work during the winter months except perhaps to apply barnyard manure or clear a field of stalks where it was not fall-plowed. As spring approaches, however, further class study of seedbed preparation is made in the light of a knowledge of soils gained thru a more thoro study made during the winter months. Plans for spring preparation of seedbed are written by the boys carrying corn projects, and a classroom and laboratory study of methods of testing seed is made, during which the boys having corn projects write plans for testing their own seed. Following this the seed is actually tested.

Then follows in proper order the study, planning, and execution of plans regarding treatment of seed, planting, cultivating, insect-control, harvesting, marketing, etc. All are approached in the classroom, continued to the laboratory, from laboratory to field trip, from field trip to project plan and ultimately incorporated into the project itself. All of this is taught the entire class as part of the regular year's work in the enterprise, but given the aspect of project study especially for those boys who carry projects in that particular enterprise.

Probably the entire class will keep notes on such study. To those boys who carry projects in the enterprise the

other way around.

Project Study Becomes Day-to-Day Study

Thus the study made for the purpose of enabling a group of boys in the class to write plans for some stage of their projects becomes the class study of that enterprise for the year. Where the range of individual projects is fairly wide and includes the most important farm enterprises it is quite possible, thru such a method, to teach the most important enterprises very largely thru the projects. It will be observed that careful, well-timed organization is necessary in using such a method. Thoro, careful organization is necessary for effective teaching by any method.

By basing the greater part of the year's study on the individual projects, the teacher is able to impress students with the importance of the project. In fact, its importance becomes obvious to the students. On the other hand, if the year's instruction is based entirely on enterprises regardless of projects, boys have difficulty in establishing connection between the instruction and the project. The natural result is usually a lack of interest in project work. Little can the boy be blamed for such lack of interest.

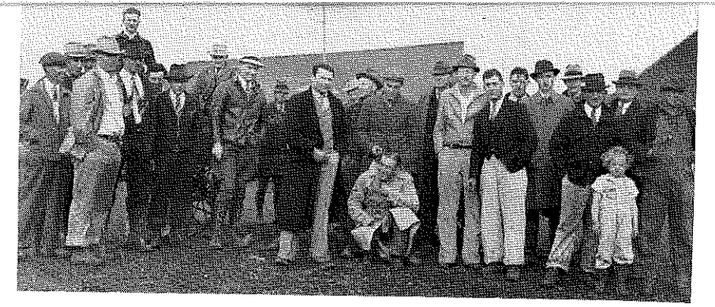
It becomes apparent that sometimes jobs of the project enterprise must be taught some time in advance of the execution of the plan in order to be made a part of the year's class instruction. For instance, the year's advanced work in the classroom may be completed early in May while the boy may have no occasion to control chinch bugs till toward the middle of June or later. Only in a few cases, however, will it be impossible to keep the day-to-day class instruction in step with project work.

Plans and Managerial Ability

May we return again to the rather arbitrary assumption that a good manager is one who can plan adequately and execute his plans? If such an assumption is sound, it would seem there is little chance for developing managerial ability thru the project unless the project is thought thru thoroly, i. e., adequately planned. The project plan is the foundation upon which effective teaching thru the project must be based. Without this foundation the possibility of building a super-structure of any consequence seems remote.

By all means a plan should not be long. Short, definite statements as to what the boy proposes to do and why are sufficient. Long drawn out plans are boresome to all concerned. It is good literary training for a boy to learn to put much in few words.

There is probably no other teaching tool possessing greater teaching possibilities than the project. Like a mechanical tool, however, its possibilities and limitations are determined by the skill of the user. If we find the project an awkward teaching device, it might seem so because we have not skilled ourselves in its use. The skill one acquires in the use of any tool is determined by the extent to which he uses it, along with careful thought and study as to how its use might be made more effective.



A part-time class on a field trip to study successful farms and farmers. This class was organized and conducted by trainees in agricultural education at Oregon State College, under the supervision of H. H. Gibson, as a means of providing participating experience in part-time work. Two trainees, the state supervisor and the teacher-trainer are among those in this group.

The Project Diary

Like the project plan, if the project diary does not serve a definite, worthwhile purpose there seems to be no justification for keeping one. A diary which is not thoro and complete is of little value. Incomplete information is sometimes actually misleading. The diary should picture the progress of the project in a vivid way. The plan should know the extent to which the pupil has anticipated problems and difficulties in writing his plan. The diary should show how he met such difficulties and problems when they arose, giving an insight into the boy's resourcefulness and initiative.

This brings to mind a case in which a sorghum project paralleled a field of oats. In his plan the boy anticipated an attack on his sorghum by chinch bugs when the oats were cut. He planned a tar-line barrier and figured its probable cost. It so happened the oats were cut during dry weather. The boy decided a dust barrier would be effective and less expensive. His diary in a brief way showed this change in his plan and why the change was made.

A diary is a fairly reliable index of the attitude of the boy toward his project. The degree of interest and enthusiasm can usually be determined in reading the diary. The care and attention given the project is indicated in the diary.

A well-kept diary is a great help in determining winners in project contests. When properly used the diary can be made a distinct aid in teaching succeeding classes.

The diary can serve all its purposes without being lengthy or elaborate. A short sentence of well-chosen words can usually reveal the status and condition of the project at any particular stage of its progress. A thoro diary should record a statement on an average of once every week or at longest every two weeks while the project is growing. Every incident or occurrence which has an influence in the probable outcome of the project should be recorded. The date should be given with each statement. In brief, the diary is probably worth while, if it serves a definite purpose.

Community Guidance Thru the Community Survey

(Continued from page 53)

and thirteenth meeting was a banquet for the evening-school men and their wives and for the farmers' club which is an outgrowth of an evening school four years ago. One hundred attended this banquet and listened to a lecture on soil conservation. The teacher of agriculture conducted the first three meetings alone. Extension men from the Michigan State College helped with the remainder of the meetings.

As a result of this effort, besides the 4-H Clubs already mentioned, 15 new farm account co-operators are keeping records of their business, six former co-operators are still active. Two special poultry records are being kept. One farmer joined the cow testing association. The 4-H Club federation this year consists of 12 clubs with 145 members. This group will have its achievement exhibits at our school fair. Some of the evening-school men have shown an interest in a special night school division of our fair.

Aside from these definite results from the evening school in the form of projects, the entire community supports our high-school agriculture department more strongly than before and many now realize that agriculture is an important industry in this community's life. The day-school pupils are definitely interested in the whole program. The economics class last year made a survey of the city proper, which the agricultural economics class did not do. Another simple but important result of the night school is the friendly contacts the men have made among themselves and with the college extension men. They are now interested in each other.

One can conclude that the survey instrument is useful in establishing a background for teaching; that it is a good device for making community contacts; that it is an incentive to community thinking and a promoter of better understanding between city and rural people; and thru it all it provides a splendid background for community guidance.

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