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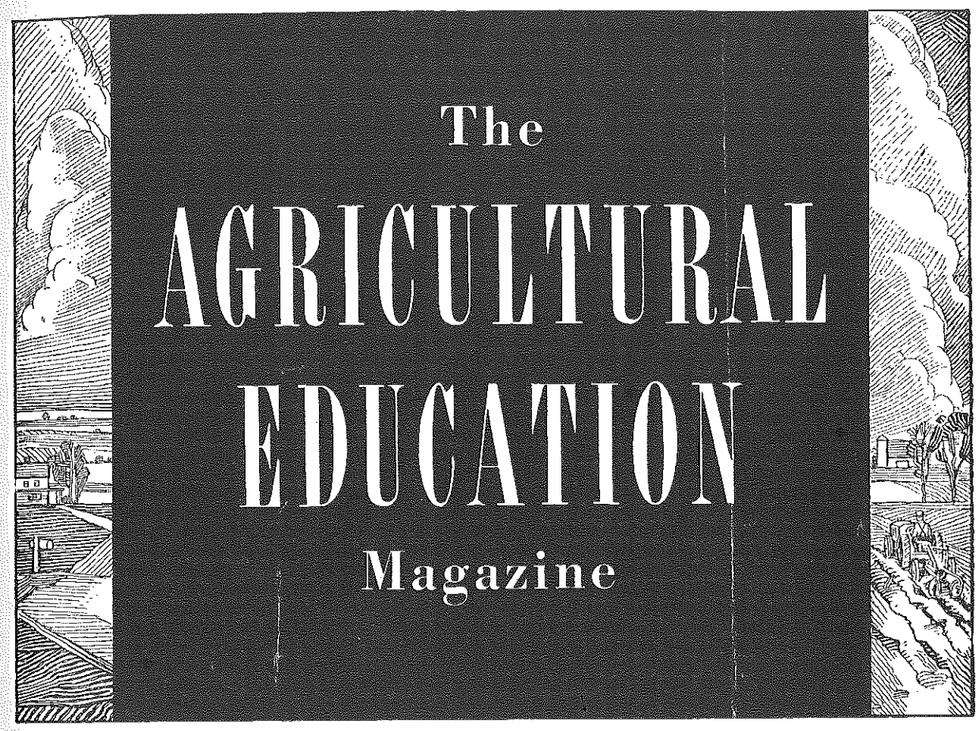

The AGRICULTURAL EDUCATION Magazine

I see America basically as soil. Its wealth and power are rooted in the earth, in the actual resources of the land; when these are used up America will cease to be.
—*Will Durant*

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The Agricultural Education Magazine

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

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Editorial Comment

Our Former Editors

Hamlin

Dickinson

Hammonds

Olney

A Decade of Service

TEN YEARS have passed since the day when a small group of leaders in agricultural education met and conceived a magazine for teachers of agriculture. Some said it couldn't be done. But it was done, and the veritable mine of recorded experiences, information, and inspiration testifies to the soundness of the faith of these pioneers.

On this page are the likenesses of the four former editors. Dr. H. M. Hamlin, then of Iowa, now of Illinois, served from 1929 to 1930. Dr. Sherman Dickinson of Missouri and Dr. Carsie Hammonds of Kentucky carried forward thru 1930 to 1932, and 1932 to 1935, respectively. Dr. Roy Olney of West Virginia and now of New York State has served four years. As we look over past volumes we are impressed by the vitality injected by these men, and by the time and energy that must have gone into every issue. During the past two months the editor has become keenly aware of the invaluable service of the special editors, some of whom have been at their jobs almost from the beginning.

For those who write for us, we should all be especially appreciative. In the annual reports issued by Doctor Olney it is gratifying to note that the number of contributions by teachers of agriculture has increased. This is a healthy indication. Agricultural education will move forward in proportion as teachers study their responsibilities and opportunities, write about their experiences, and develop a professional consciousness which comes from helping others who are in the same type of work.

No radical changes are contemplated editorially for the near future. It is to be hoped that this publication will always reflect the needs and desires of workers in the field of agricultural education. Suggestions for improvement will always be welcome.

Finally, we suggest that teachers, teacher-trainers, and supervisors write those articles they have been thinking about for some time, and send them to the appropriate special editors. There are many problems on which all members of the profession need help: How can we get young men established in farming? How should we organize and direct farming programs for part-time students? What can we do about rural electrification? How can we do a better job of directing learning and advising F. F. A. chapters? How can we raise the standards of our profession? Let us use *our*

Vocational Agriculture and the American Vocational Association

SOME of the objectives of the American Vocational Association, as pointed out in the original constitution, are as follows: to assume and maintain active national leadership in the promotion of vocational education; to render service to state or local communities in stabilizing and promoting vocational education; and to provide a national open forum for the discussion of all questions involved in vocational education.

Thruout the years, the A. V. A. has endeavored to encourage and promote the effective development of all phases of vocational education in the United States. The effective development of any program depends upon how thoroly it conforms to the social, economic, and technological conditions and changes. One of the important forms of vocational education in this country is vocational agriculture. More people are engaged in agriculture than in any other single group of vocations. Thus it is apparent that the future well-being of the nation depends, to a great degree, upon the proficiency of those engaged in agriculture.

According to the 1935 Census, there are more than 6,812,000 farmers in this country. Perhaps, on the average, the farmer does not operate a farm more than 35 years. Figured on this basis, each year in the United States we need approximately 190,000 persons to become farm operators. If we may assume that farmers ought to be trained, that it takes four or more years to train a farmer, and that as many as three-fourths of those in training will become farmers, we should have in training in agriculture each year in America one million or more persons. Since only a small percent of the prospective farmers can go to college, it is apparent that they must be trained in courses below the college level, if they are to be trained.

The farmer of the present and of the future needs to be trained. Plowing with a hand plow is a much simpler activity than plowing with a tractor. Using a scythe and a cradle is a very different operation from handling a combine. One needs only to observe the condition of the soil in many sections of the country to see what is happening to the fundamental basis of our national well-being. There must be developed in the people on the farms the abilities and attitudes necessary to care for the soil and, at the same time, make a living that will enable them to live a good life. The farmer of today and tomorrow must meet and solve problems in soils, insect control, feeding and breeding of farm animals, marketing, farm mechanics, plant and animal diseases, and so on. Farmers must be trained if they are to do this, and compete with trained men in other vocations.

For 20 years, farmers have not received their fair share of the national income. In 1919, the national income in the United States was 66 billion dollars. Of this amount 18½ percent was farm income. Twenty-five percent of all persons earning incomes were farmers, and 30 percent of the total population was farm population. In other words, 30 percent of the total population had to live on 18½ percent of the total income. In 1932, the total income of all people in the United States had dropped to 52½ billion dollars. Of this amount 7 percent was farm income. Thus, the farm people received only one-fourth of their share of the national income. Today the situation is much better, thanks to the developments in behalf of the farmer. Farmers are now much less at a disadvantage in the matter of price parity, and many improved practices have been adopted to reduce inefficiency in farm production. But there is much yet to be done.

A concrete example of the fact that the American Vocational Association is shouldering the responsibilities of leadership in the effective development of vocational education in agriculture may be observed by reading Monograph 19, just recently published by the United States Office of Education. In 1934 the Executive Committee of the American Vocational Association appointed a committee with one representative from each region and two representatives at large, whose duty was to formulate a set of fundamental principles

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

Contributions of Leading Americans to Agriculture—Alexander Legge, 1866-1933

RALPH H. WOODS, State Director of Vocational Education, Frankfort, Kentucky

ALTHOUGH known as "Legge, the Abraham Lincoln of Industry," Alexander Legge loved country life and farm people. This love induced him to contribute liberally to the American agriculture of his own day and to the future well-being of rural life.

R. H. Woods

In everyday language, we should say that Alexander Legge was a self-made man. Born the son of thrifty, industrious and self-reliant Scotch parents, on a farm in Dane County, Wisconsin, the year after the Civil War, the boyhood days of young Alexander were similar to those of other farm boys of that period. His parents moved to a ranch in Colfax County, Nebraska, when he was 10 years old. His formal education consisted of a few terms in the pioneer schools of his community. Yet this rugged life on the farm and ranch, and his inherent capacity and home training were to fit him well for the leadership he was to exert in American society.

Improved farm machinery always appealed to Alexander Legge. The first power thresher in his home county was operated on his father's ranch, and young Alexander was directly responsible for its introduction. Consequently, he organized a threshing crew and moved from farm to farm. This appeal led him to accept a temporary job assembling farm machinery. Once in the farm machinery business, his industry, shrewd business judgment, high sense of values, and character carried him to the presidency of The International Harvester Company. As an executive of that company, he was constantly endeavoring to see that the company manufactured machines that were more efficient, simpler to operate, and more economical to maintain.

As an industrial executive, serving farmers thruout the world, Mr. Legge kept informed on farmer problems. He knew farm economics and farm conditions, not only in the United States but thruout the vast territory served by his company. Because of Legge's wide experience and sound judgment, President Wilson drafted him to serve on the War Industries Board, and, after the war, to serve as an economic adviser to the American Delegation at the Ver-

ured. In the farm machinery industry he played a vital part in the transformation of American agriculture from a mere means of subsistence to a highly commercial enterprise.

Mr. Legge was intensely interested in the 4-H Club movement. He was a member of its first board of directors and always attended every directors' meeting. He was a generous annual contributor and was very influential in securing support from others. He originated the plan of entertaining the 4-H Club members in attendance at the annual International Livestock Show and the National Club Congress. His feeling for rural youth is exemplified in the following quotation: "I would also offer

Alexander Legge

the suggestion that in the future more attention be given young folks, particularly the boys' and girls' clubs, who in their competitive contests are learning the value of teamwork. It does not matter much what becomes of us old fellows who will soon be out of the picture. The problems of the future must be met by the coming generation."

During the trying days of the depression, when agricultural credit was hard to secure, Mr. Legge did what he could to alleviate the condition. The stock farmers of his own Eastern Nebraska were hard pressed for operating funds, which they were unable to secure

for $10,000, with instructions that it should be loaned to the smaller cattle growers in the community. At the same time, he sent his check for $100,000 to Mr. E. F. Folda in Omaha, with similar instructions. These characteristic acts are the best possible proof that Mr. Legge's heart was with the farmer.

When the Federal Farm Board was created by Congress in 1929, President Hoover sought the advice of farm cooperatives thruout the country as to the logical chairman. Almost unanimously, they approved Mr. Legge. Concerning this, President Hoover said: "With this backing, I again sought to draft Mr. Legge into public service. This time, because of his profound interest in agriculture and the endorsement of the farmer representatives, he accepted the assignment for a period of one year. I subsequently persuaded him to stay on longer, but at the end of twenty months, as the Farm Board activities had been organized and his own business responsibilities weighed greatly on his mind, he resigned." As to Mr. Legge's services with the Farm Board, Mr. Chris L. Christensen, Secretary of the Board, now Dean of the College of Agriculture, University of Wisconsin, said: "It was Alex Legge's intimate knowledge of farming, together with his broad business experience, that made him an invaluable leader during the first 20 months of the history of the Federal Farm Board, when its policies and procedures were inaugurated and the groundwork was laid for making available government funds for loans to co-operative associations." Mr. Charles Teague, member of the Board, relates the following incident, which shows clearly Mr. Legge's sympathy toward the farmer: "I remember once a co-operative head came to the Board for assistance. He needed $5,000 to keep from being closed out. But his outfit could not legally qualify; the Board could do nothing for him. Mr. Legge loaned him the money out of his own pocket, without security."

In 1932, the College of Agriculture, University of Wisconsin, accorded Mr. Legge honory recognition for distinguished service to agriculture and rural life. Dean Chris L. Christensen, in bestowing this honor, described Mr. Legge as "one who knows the problems of farming, who has proved his worth and his usefulness in an effort to serve American farmers and farming."

Mr. Legge was a leader in creating the Farm Foundation and, by a gift to this foundation of $400,000 in 1933 and a bequest of $500,000 in his will, he dedi-

people of America. As early as 1933, he had offered to match, dollar for dollar, any sum given by any member of the United States Chamber of Commerce for the purpose of experimentation in improving farm conditions, saying: "Men of wealth have left large fortunes for foundations and organizations of one kind or another to promote research in the fields of medicine, industry, mining, and practically all the fields of science except agriculture. Men of wealth have left fortunes to support hospitals, art galleries, and museums, but it is significant that practically all of the large fortunes have been left for educational, research, and cultural activities that are largely available to the urban population. There is a place in America for a foundation to which men and women may leave their contributions that will be dedicated to the advancement of the rural people."

To make this Farm Foundation a permanent reality, Mr. Legge and others executed a trust agreement. The trust agreement states that the objectives of the foundation are as follows:

"Recognizing the importance to the national welfare of improving and at all times maintaining healthy and satisfying conditions of life for the farming and rural population of the country, with adequate economic returns and social, educational, and cultural advantages, a continuing foundation to be known as the Farm Foundation is hereby created. . . .

1. To encourage and develop co-operative effort and community organization and consciousness as means for improving the economic, social, educational, and cultural conditions of rural life.
2. To stimulate and conduct research and experimental work for the study of any economic, social, educational, or scientific problem of importance to any substantial portion of the rural population of the country, including problems of production, marketing and purchasing, and the sound co-ordination of the agricultural with the industrial, financial, and mercantile life of the country.
3. To encourage, aid, or finance any university, institution, corporation, or persons in the conduct of any such research or experimental work.
4. To disseminate educational and useful information developed as a result of any such study, research, and experimentation, or otherwise, in such manner as to be of practical value to the farming population.
5. To promote and enlarge the intellectual and cultural interests and opportunities of the rural population thru community action."

Ex-Governor Lowden of Illinois, in his public announcement of the Farm Foundation, said: "For many years, Mr. Legge had felt the need of some agency free from local or political considerations, which would act as a clearing house and testing ground of ideas for the improvement of farming conditions and farm life and would encourage experimentation and co-operative effort along sound lines. Such an agency should be adequately endowed and equipped to carry on research and educational work, directed by trustees chosen for their diversified experience, recognized ability,

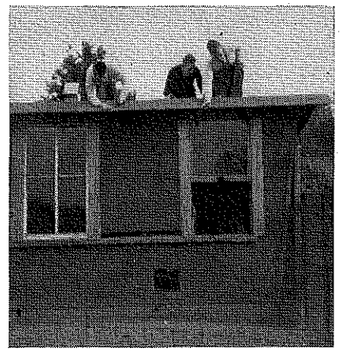
Thus the Farm Foundation stands as a memorial to a great American, who achieved world-wide recognition, and who, thruout his life, revealed that the problems of the men and women of the farm and the future well-being of country life were closest to his heart.

Note: For his information, the writer has drawn freely upon "Alexander Legge, 1866–1933," by Forrest Crissey, The Alexander Legge Memorial Committee, Chicago, Illinois. All of the quotations are from this publication.

Agricultural Education for Handicapped Children

J. MANDIGO, Teacher,
Lakeview Consolidated School,
Battle Creek, Michigan
(Formerly Instructor at the Michigan School for the Blind)

IN 1934 there was started at the Michigan School for the Blind the first full-time class in agriculture for the blind or partially-sighted students in the United States. The first-year class was designed as a non-vocational course with the hopes that it would have some cultural value. The second-year



Blind Boys Build

students continued a study of some of the more advanced problems of general agriculture which seemed to have possibilities for the visually handicapped boys.

The results of an extensive study and subsequent trials seem to indicate that poultry raising offers the best vocational possibility in agriculture for the blind. For several years a few of the schools for the blind have offered some training in poultry husbandry. Such training has been offered thru part-time classes in a few cases, while in others it has taken the form of hobby clubs. The success of these blind students and of other blind persons who have received no training in making a livelihood thru poultry farming, encouraged us to start regular day classes in agriculture.

Because this is a residential school drawing students from all parts of the state, it is impossible to carry on supervised home projects. This situation left only the school project as the logical means of providing practice in the skills studied in the classroom.

In the spring of 1935 the class in agriculture secured a loan from the school to buy material for building a 20 ft. by 20 ft. Michigan shed-type

worth of used lumber from a local wrecking company. Regular employees of the school laid the concrete wall and floors, but the students did the rest of the work of building the house.

During the construction period I found that totally blind students were often some of the best workmen. They were able to measure and cut lumber, assemble and erect the framework, nail on siding and roofing, and even make the window frames. I would not recommend that all blind people build their own equipment, but I feel that these boys had many opportunities for learning experiences which few such handicapped persons have had. The average blind person, because he has been sheltered in many ways, is frequently lacking in practical knowledge. The boys had been entirely uninformed regarding prices of lumber, cement, roofing, glass, and other materials, but seemed especially eager to learn of such things after they saw a practical need for them.

The class started out by buying 30 Barred Plymouth Rock hens. Later, some leghorns from a well-bred strain were purchased. Two students were assigned to care for the flock each week, while one other student sold the eggs to local customers. The details of how the flock was to be fed, cared for, or disposed of were worked out as a part of the regular class work.

This project has given the students a chance to work out their own answers to many questions such as: How much does it cost to raise a pullet up to five months of age, or a broiler up to 12 weeks? How many eggs must a hen lay to return a profit? What are the practical ways of controlling pests and diseases? Why and how should we keep farm records? The project has provided a means of learning the answers to many other questions thru practical experience.

There has been a reasonable profit from this small flock of chickens each year. This money has been used for the purchase of new equipment. The plans for the future are to conduct the project on a profit-sharing basis for the members of the poultry class.

Book Review

Practical Problems in Botany, by Wilfred W. Robbins and Jerome Isenbarger, John Wiley and Sons, Inc., 1936; pp. 385, illustrations, 230, list price $2. The unit plan of organization is used. Problems listed under various units range from four to ten. The unit is introduced with a preview, suggested exercises follow the problem, with additional exercises and questions at the close of the unit. The mechanical features of the text are excellent. The illustrations are well chosen and splendidly reproduced. Stress is laid on the principles of plant growth, introducing details of structure only where needed in understanding plant processes. Systematic botany is given relatively little emphasis, while considerable attention is given to the economic implications. This text should prove highly valuable to teachers of vocational agriculture and others who are interested in laying a foundation of fundamental principles which will enable pupils to

Practical Vocational Guidance for Farm Youth*

W. A. ROSS, Specialist in Agricultural Education, Office of Education, Washington, D. C.

W. A. Ross

CHANGE and shift seem to be the identifying characteristics of the age in which we are living. Out with the old and in with the new is the order of the day. "Outmoded," "outdated" and "outclassed" have become familiar words to the man of the street, who is ever conscious of a faster and faster tempo in all life's activities.

The need for guidance is, therefore, increasingly important every year. Mere living has become a complex affair even when shorn of its usual attending economic aspects. But faced with the two responsibilities of living and making a living simultaneously, most adults will admit that they are truly baffled on more than a few occasions. Is it any wonder then that youth faces real problems in connection with choice of, training for, and establishment in a suitable occupation?

There seems to be no satisfactory and generally accepted definition to cover the term "guidance." We do know, however, that guidance penetrates and interlocks almost every phase of human life from childhood to old age and that a wide variety of activities is included under such a heading. General guidance objectives seem to be exceedingly broad, including many school and life activities which can not be satisfactorily distinguished from certain general educational objectives.

My contact with guidance of various kinds has brought me to the conclusion that there are at least six essentials in any comprehensive concept of guidance:

1. It is a service everyone needs, and should be available to all who want it and who can profit by it.
2. It should uncover human abilities and serve as a means for keeping out of trouble along life's highway.
3. It should serve as a "trouble shooter" to those who have encountered difficulty, and assist them in remedying life situations.
4. It should serve the whole individual rather than a fractional part of his total person because of human interdependencies and interrelationships.
5. It should make people better able to guide themselves as they go along. Effective self-guidance after all is the ultimate aim.
6. It should be continuous, because human adjustment is not a state of being but a process. Therefore changing times and conditions may mean that an individual is in adjustment at one time but badly out of adjustment at another.

enter upon, and progress in it" is quite tangible. Implied in it are at least such steps as these: a study of the individual; a study of occupations; counseling; both group and individual guidance; satisfactory placement; and a certain amount of follow-up. Vocational guidance should be considered as a joint responsibility of the home, the school, and the community.

In discussing the guidance implications of a specific farm youth organization, The Future Farmers of America, may I point out here that both the "mother," vocational agriculture, and the "child," the F. F. A., are primarily concerned with training for farming occupations and that this training involves a great deal of guidance. As students of vocational agriculture, the members of the F. F. A. have taken the initial step in becoming established in one of several agricultural occupations. Individual preference, home influence, and certain contacts along with some professional guidance have been responsible for that choice. All do not reach their original goal but the same is true of nearly any occupation or profession.

WHEN vocational agriculture courses were first established in public high schools under provisions of the National Vocational Education Act of 1917, the boys enrolled in these courses began to feel a spirit of comradeship due to a common background of country life and their desires with regard to farming as a vocation. It was only a natural development then for students of vocational agriculture to be drawn together into local group organizations having certain educational, self-improvement, co-operative, and guidance features.

Before long the idea of banding together into State organizations was tried. This move established contacts between different localities, and widened the interests of local groups. By 1927, the goal of a nationwide organization of students of vocational agriculture was gleaming in the distance in the minds of many farm boys as well as certain far-seeing adults who were engaged in this type of education. Within a year that dream had become a reality, and the Future Farmers of America was a going concern.

Certainly something of inestimable value was added to the program of vocational education in agriculture when the F. F. A. came into existence. The organization became a definite part of the public school system. The boy's point of view on preparation for farming shifted considerably. He received a new interest in agriculture and a quickened enthusiasm for farm work that had not been there previously. There was created a new appeal and a greater challenge to the very best that was in him. There was vocational guidance.

But you may ask, and rightfully so, vocational agriculture—primarily concerned with occupational training—has also many of the attributes of a program of vocational guidance. Why does it work? Suppose we turn, first, to the purposes for which the F. F. A. organization was formed; for therein we find our first clue. These purposes are as follows:

1. To develop competent, aggressive, rural and agricultural leadership.
2. To create and nurture a love of country life.
3. To strengthen the confidence of farm boys and young men in themselves and their work.
4. To create more interest in the intelligent choice of farming occupations.
5. To encourage members in the development of individual farming programs and establishment in farming.
6. To encourage members to improve the farm home and its surroundings.
7. To participate in worthy undertakings for the improvement of agriculture.
8. To develop character, train for useful citizenship, and foster patriotism.
9. To participate in co-operative effort.
10. To encourage and practice thrift.
11. To encourage improvement in scholarship.
12. To provide and encourage the development of organized rural recreational activities.

You will agree with me that guidance in both a broad and narrow sense is involved in these 12 purposes. Numbers four and five, for example, deal specifically with the choice and development of farming occupations. But involved and intertwined in all of these purposes, you find evidence of social guidance, health guidance, recreation and leisure-time guidance, general educational guidance, and what is comparable to employment guidance.

THE next point to which I wish to call attention is that the F. F. A. operates under a plan which demands individual as well as group action. Guidance can only be effective when there is action—something done about it by the person concerned.

The fact that each member of the F. F. A. is building his own individual farming program is a strong guidance factor. Each member's goal is a start in farming by the time he is thru high school. This means exercising the power of choosing, selecting, weighing and evaluating, planning, making important life decisions, and executing personal plans. All this means experience and growth in ability to stand on one's own feet in actual life situations, and constitutes the opening stages of progressive and satisfactory establishment.

During this process there is an adult, the teacher of vocational agriculture and local F. F. A. advisor, who is willing and capable of counseling, guiding, and assisting each individual member. The members consider him a friend and helper instead of a dictator or a boss. He makes no decisions for a boy but cleverly guides him in the solution of his own problems and in the making of his own decisions.

Instead of this sort of a relationship

F. F. A. specifically provides that a member may retain his active membership "for three years from date of graduation, completion of high school vocational-agriculture classroom instruction, or leaving school." Thus the opportunity for further contact and follow-up adds continuity to this guidance service.

Advancement in membership degrees calls for considerable individual achievement, planning, and self-direction. Altho it requires a certain amount of guidance it also develops self-guidance. The Green Hand member who wants to become an American Farmer must set his stakes ahead and drive to them over a period of four years or more. This involves choice making, adjustment, character development, emphasis in the proper places, and meeting standards of performance.

The very fact that F. F. A. members set up their own programs of work, conduct their own chapter meetings, and finance their own activities, puts self-instruction and self-guidance in the foreground. The fact that farm boys do things for themselves rather than asking or expecting that they be done for them creates a favorable medium in which guidance can and does really function for this rural youth group.

The controlling thought in the development of this organization is to help each individual member in improving and developing himself just as far as possible. The advantages of the organization are open and available to *all* members rather than a favored few. As each member shows ability his responsibilities are increased. If he serves well as a member of one chapter committee, for example, he may later serve on other committees and possibly become chairman of one of the important committees, such as the one on Program of Work. From there he may progress to membership on the Executive Committee or become an officer. Old officers are constantly retiring and new officers are coming up to take their places. Behind it all is the desire to serve and to perform creditably.

Prizes and awards are used in the F. F. A. organization in a practical way. Instead of only a few large prizes, several of modest size are usually provided in the various types of competition—both group and individual. Every attempt is made to keep away from competition which is spurred by distorted awards out of proportion to the attainment, which have a tendency to create a false idea of values in the minds of the competitors.

THE important blocks in the foundation upon which the F. F. A. is built are as follows: character development; leadership; co-operation; thrift; scholarship; improved agriculture; organized recreation; citizenship; and patriotism. In Hawaii and Puerto Rico, especially, the F. F. A. also functions as an Americanization agency, all because agriculture—the common bond of interest—has drawn the boys of many creeds and nationalities together into their own organization.

Learning to participate in and conduct a public meeting; learning how to speak in public; learning to handle business matters pertaining to agriculture, to buy and sell co-operatively, to earn and wisely use time, labor and money; assistance thereon, to improve the home and its surroundings, and to contribute something to the general upbuilding of the farm community are just a few of the benefits which the F. F. A. member reaps. It's the boy-initiated activities that provide for adjustments, that discover talent, and provide opportunity for developing talent once it is discovered. Officer-training schools and conferences give additional assistance to boys in positions of leadership.

Theodore Roosevelt once said "If you are going to do anything for the average man, you must begin before he is a man; success lies in working with the boy, not the man." Thru the activities of the F. F. A. over 171,000 farm boys in 5,700 local centers are finding their interests, aptitudes, and abilities in order to engage in an agreeable and reasonably profitable occupation.

Some F. F. A. members find out during their contact that they do not want to become farmers. In such instances we feel it has been beneficial to them to have eliminated that occupation from their list of possibilities. It is also true that under present conditions many boys who would like to farm and are fitted for it will be unable, for several reasons, to do so. F. F. A. experience helps them get into allied occupations where they can capitalize on their experience and interests. For those who do forge steadily ahead in training for farming, there are opportunities, but decidedly different from the kind of opportunities open to your father and mine.

AS a final example of the manner in which guidance operates thru the F. F. A., I wish to call your attention to the thousands of members who after leaving high school are guided into adult farm organizations, there to utilize their training and ability on adult problems. In taking their places in farm communities as good farmers and good citizens they are progressing from the world of youth to the world of the adult.

F. F. A. influence has even extended across the sea into Europe, where we find today the Future Farmers of Greece; the Future Farmers of Bulgaria; and Progressive Farmers of Albania. These three organizations are built on the foundation laid by the F. F. A.

It seems that guidance may be approached, generally speaking, from five somewhat varied points of view: (1) as emphasis; (2) as adjustment; (3) as choice-making; (4) as method; and (5) as a form of organization. To me the guidance involved in vocational-agriculture training and F. F. A. experience classifies essentially as method.

With this approach less of an attempt is made to draw a sharp line between the functions of instruction and guidance. Since all experience implies guidance it should be concerned with all persons in a situation. This point of view conceives of education for life as an exploration process, engaged in by every individual as a going concern, running under his own power. As such he has problems to solve, situations to meet, and satisfactions to gain. In his investigations he uses important agencies available which offer assistance—the home, the library, the church, and the school.

The teacher approaching guidance

attention to sources of information, and seeks to make the individual under his direction progressively better able to guide himself. The teacher's job is not to decide matters for the learner but to help him make important decisions more intelligently.

Over a year ago I served as a member of an Office of Education Committee on Vocational Guidance. Many of the ideas expressed here are a result of that contact. During the deliberations of the committee the following significant statement was developed:

> "If it is true that good citizenship in a democracy requires a person capable of doing his own thinking, making up his own mind, one who is self-supporting, self-contained, self-directing, yet sensitive to the problems and needs of other people, then the best kind of guidance would be the sort that develops inner resourcefulness, that enables a person to make his own adjustments and choices, and in general to take charge of himself intelligently."

As a farm youth organization leavening and enriching the entire vocational agriculture training program, I am confident that the Future Farmers of America, functioning as it does, is providing just that kind of guidance to its youthful membership.

*From an address made before the Vocational Guidance Section of the American Vocational Association Convention, St. Louis, Missouri, December 3, 1938. (Thru courtesy of the A.V.A. Journal)

Professional Activities

Dr. B. C. Lawson, assistant professor of vocational education, Purdue University, has recently joined the staff of abstractors for *Educational Abstracts* to represent agricultural education. He has indicated that he will be glad to receive copies of published research and other published material appropriate for abstracting.

Carl G. Howard has resigned as associate professor of agricultural education at the University of Idaho and has accepted the position of associate professor of agricultural education and itinerant teacher-trainer at State College, New Mexico, beginning February first.

Mr. H. T. Hall has been appointed State supervisor of agricultural education in Iowa. Mr. Hall previously was assistant supervisor. Mr. Wendell M. Wescoat has been named as assistant supervisor. He has been teacher of vocational agriculture at Osage, Iowa, for the past three and one-half years, and had taught in Iowa previous to this for five years.

Ernest L. DeAlton, assistant supervisor of agricultural education in North Dakota, has been named supervisor and professor of agricultural education to succeed the late Professor E. H. Jones.

The fourth National Conclave of Alpha Tau Alpha, held at St. Louis in December, 1938, was attended by 20 officers and delegates representing nine chapters. Dr. A. W. Nolan, Illinois, is president, and H. J. Rucker of the same institution is secretary-treasurer. News of activities of this organization will appear in this column from time to time.

(Editorial Note: This column on professional ac-

A. M. FIELD

Methods

Four Types of Teaching Units

G. A. SCHMIDT, Teacher Education,
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G. A. Schmidt

THE lessons that arise in class instruction in the all-day vocational-agriculture course naturally fall into four groups or types. These four types of teaching situations are:

1. Operative jobs
2. Managerial jobs or problems
3. Jobs taught from informational point of view
4. Jobs or problems where the conference procedure can be used.

Examples of jobs or problems illustrative of each of these four types of teaching situations or units are given in condensed outline form in the accompanying table. Likewise the teacher's objectives for each type of lesson are given.

The writer firmly believes that efficiency in teaching boys in the all-day vocational-agriculture classes is dependent upon the recognition of these four types of lessons and upon teaching each lesson in accord with the type where it should naturally fall. Reasons for the above statements are given in the discussion which will follow.

1. Operative Jobs

Important farm jobs in which the training value for the boys is essentially manipulative or manual skill in doing the job in accord with a standard practice or in accord with reliable and efficient specifications should be, in the opinion of the writer, taught from the *operative* point of view. The boys should learn to do these jobs efficiently, and the teacher's objective in this type of lesson is to develop the abilities of the boys to do the jobs correctly and to appreciate the importance of the jobs. Developing questions for study, making reading assignments, having class discussions or recitations based on assigned study is costly and time-consuming in this type of teaching unit. Furthermore, lecturing about such jobs is even worse. "One learns to do by doing" is a generally accepted slogan in vocational education, and this slogan applies 100 percent in teaching strictly operative jobs. Too much time is wasted in teaching operative jobs by talking about them. The boys should be shown how to do such jobs and then given ample practice in learning how to do them.

The teaching procedure in condensed form suggested for operative jobs is a lesson plan. As has been mentioned, the teaching of operative jobs follows very closely the same steps. The important teacher-preparation for operative jobs is the making of analyses for use which outline up-to-date, economical, and efficient ways of doing the jobs, which the teacher would follow in giving the demonstration. Naturally these analyses would be different for each job. The teaching procedure for these jobs is essentially the same.

2. Managerial Jobs or Problems

Managerial problems are taught to help boys to make an intelligent decision in regard to a farm problem, and to give them training in thinking. Managerial jobs are entirely mental. In all teaching situations where a clear-cut and important decision needs to be made, the lesson or the job should be taught from the managerial point of view. One learns to think efficiently by solving many real, life-like, and worth-while problems —problems that face him and affect him—and by following a sound or reliable thinking procedure.

Boys engaged in real project work have many real, life-like and worthwhile problems confronting them in such work. These problems are of vital interest to such boys. In vocational agriculture we are, also, very fortunate in having available one of the most effective thinking procedures that can be used to give training in thinking and to help boys solve their important managerial problems. The steps in the thinking procedure are here given:

1. Spot the problem; that is, state the decision or decisions that need to be made.
2. Spot the factors influencing the decision or decisions.
3. Determine the nature of the information needed to evaluate each factor.
4. Get the needed or functioning information.
5. Evaluate the factors.
6. Come to a conclusion or reach a decision in the matter.
7. Make a plan.
8. Execute the plan.
9. Test the thinking that has been done.

In the classroom the thinking process is carried to the eighth step. The plan is executed when the decision is carried out or put into effect on the project. The testing of the thinking is done when the completed project is analyzed and when comparisons are made.

If the boys in the all-day classes are to be given effective training in thinking, they must individually engage in the thinking steps. Here again the slogan, "We learn to do by doing," applies 100 percent. However, the doing in this case is entirely a mental activity. The teaching procedure suggested for managerial problems or jobs is outlined in the table.

In preparing to teach managerial jobs lesson plans are not the most important preparation the teacher can make. In general, the teaching procedure for managerial jobs is essentially the same. Here again, the most important teacher-preparation consists of making analyses of these jobs. If the teacher has such analyses, it should be comparatively easy for him to develop on the blackboard with the boys the analysis of each managerial job taken up in class.

3. Informational Jobs

Many farm jobs or problems arise in teaching boys in the all-day classes where the important training value lies

Four Types of Teaching Units in Vocational Agriculture

TYPE	OPERATIVE	MANAGERIAL	INFORMATIONAL	CONFERENCE
Examples	1. Treating seed oats 2. Castrating pigs 3. Dehorning steer 4. Testing milk	1. Choosing a breed 2. Choosing a variety 3. Determining scope 4. Selecting a field	1. Care of calf 2. Brooding chicks 3. Planning a rotation 4. Housing the flock	1. Selecting a project 2. Financing a project 3. Making a start in a program 4. Determining the jobs in a project
Objectives	1. Ability to do the job 2. Appreciation	1. Increased thinking ability 2. Intelligent solution of problem	1. Understanding of functioning facts 2. Appreciation	1. Increased thinking ability 2. Intelligent solution of problem
Step I	Introduction and motivation	Introduction and motivation	Introduction and motivation	Introduction and motivation
Step II	Demonstration by the teacher	Development of decision, factors and kinds of information needed	Development of problems for study	Development of important factors to consider
Step III	Supervised practice	Supervised and outside study	Supervised and outside study	Individual study
Step IV	Application	Discussion a. Establish basic facts b. Evaluate factors & solve problem	Discussion	Individual problem
		Application	Application	Application

in the possession of the right kinds of functioning information. The assumption here is that in carrying out the job one ought to be able to do it or thoroly understand it if he has the important information. Sometimes such jobs involve some little manipulative skills and perhaps some little decisions that need to be made; but if one has the correct information, he should, by using just plain common sense, be able to do the job and make the decisions. The condensed teaching procedure for this type of teaching units is also outlined in the accompanying table.

The same general statements apply to informational jobs that were made in the discussion on analyses of operative jobs and on analyses of managerial jobs. The important teacher-preparation for jobs handled on the informational basis is an analysis of the information.

4. Jobs or Problems That Can Be Handled on the Conference Basis

Particularly in farm problems or management jobs involved in project work, many teaching situations arise where each boy in the class is faced by the same kind of problem, and where the boys in the class have practically all the needed information to solve such a problem. In jobs of this kind practically no outside study has to be done to get needed information. The boys have almost all of it.

The class instruction in this type of teaching unit consists of getting from the boys a statement of the problem, a statement of the important things or factors that should be considered in solving the problem, and a statement of the particular kinds of information needed. These may be recorded on the blackboard and later copied by the boys in their notebooks. The class instruction then ceases and individual instruction takes place. In the latter each boy assembles his own functioning facts, evaluates these, and comes to a conclusion or reaches a decision in regard to what he plans to do.

In the accompanying table is shown in outline form the teaching procedure followed in teaching a class job on the conference basis.

Jobs or problems in the teaching of which the teacher plans to use the conference procedure can be analyzed by the teacher; and the analysis is the most important preparation the teacher can make for this type of lesson. The phases for conducting a conference vary little. Any up-to-date teacher should have these clearly in mind. However, each analysis of a problem differs, and with the analysis in mind the conference should move along rather smoothly.

Summary. In the opinion of the writer efficient instruction in all-day classes in vocational agriculture is dependent on recognition of the four types of teaching situations as has been mentioned. The more or less standard teaching procedure for each type needs to be thoroly understood. Slight modifications from these are often necessary. Therefore, lesson planning is not the important teacher-preparation in teaching boys in all-day vocational-agriculture classes; but rather analyses of the jobs or problems make the basis of class instruction. The analysis is different for every kind of lesson or farm job or problem which is

Using a School Farm in Teaching

STANLEY L. BALLOUN, Teacher,
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ALTHO it is often contended that project work should be confined to the farms of the individuals and be personally owned by them, I believe that group production projects offer opportunities for certain training not obtained in individual projects. We are particularly fortunate in having a 15-acre tract of school land at the disposal of the F. F. A. chapter. The Future Farmers took over the tract in 1937 and that year it was used as a corn and potato demonstration and experiment field.

In the first place the immediate need for information of a practical nature was manifested in our crops class when we attempted to plan the planting of the field. Such problems as rate of planting, methods of seedbed preparation, varieties to try, and time to plant became very concrete problems when applied to our group production projects. Those boys arguing for improved varieties and thicker rates of planting, for instance, found plenty of opposition, and had to have definite facts and figures to substantiate their views when attempting to convince the class. They went about the job of gathering these data with more enthusiasm than I have seen in classes where the problems were presented as the problems of individual members. Too often, in the latter case, I have found the boys are inclined to the attitude that the problem should remain an individual one for the owner of that project. We have found numerous opportunities to use our group production projects as teaching devices both for class problems and for practical work on field trips.

At the completion of our corn and potato group projects last year we also had an opportunity to study the results of various improved practices which aided materially in bringing out certain good farming principles. The yields of all hybrid and open-pollinated corn varieties used in the demonstration were tabulated in a chart and posted. These figures were used in class study of corn varieties and the crops class took great interest in comparing our results with results in other near-by counties and in the State corn yield contest. In our potato demonstration field, we compared four certified varieties with two home-grown varieties, also comparing rate of planting, size of seed pieces, and fertilizers. This information was also tabulated on a chart and used in class discussion. Altho comparative results were obviously not as accurate as experimental results obtained at the Iowa State College, the boys were inclined to consider the results significant.

No work was done on the school farm in class time unless of an actual educational nature. We did most of the planning in class time, taking up one at a time such problems as time to plow, proper charge for various items of field work, method of preparing seedbed, time to plant, rate to plant, varieties to plant, and methods of cultivation. The work in the field done during class time consisted of such jobs as staking out the test-plot (took one class period of 90 minutes) and harvesting both potato and corn samples to determine yields. In the case of the potatoes, this took one class period. In the case of the corn plots, it took several class periods to harvest and weigh a sample of each of the hybrids and open-pollinated varieties.

The rest of the field work was done by Future Farmer members after school hours and on Saturdays during the school year, and during the summer one member took over most of the responsibility of cultivating the corn and potatoes with some help from the teacher. Several other members were hired from time to time to do such jobs as spraying a Canadian thistle patch, spraying potatoes, hoeing potatoes, and cutting weeds along fence rows. In most cases, we obtained use of tools necessary from parents of members. This was some inconvenience and in some cases meant that it was hard to get work done on time, but with a little effort we usually managed to keep the work up-to-date. For such large units of work as plowing, cultivating, and harvesting, we contracted with members to do the work for a lump sum. They furnished their own power and tools and were paid for the job at a set price. Altho this is a section of large farms and boys are certainly needed at home, we have not had a great deal of trouble hiring members to work on the school farm. Most of the members feel that it is an opportunity rather than an obligation and are willing to work whenever their fathers can spare them. We have not thought it best to ask members to work on the farm without compensation.

It is certainly true that there are some problems in connection with the conducting of a school demonstration and experimental farm, but they are not especially difficult problems, and the Future Farmer chapter will shoulder a large share of the responsibility if encouraged to do so. We have used committees in conducting nearly all of our projects and find the method desirable. This past year we used one committee responsible for the conduct of the potato experiment plot, one committee to finish plans tentatively drawn up in the crops class for the planting of the plot for the coming year, and one committee to make arrangements for, and to market our corn from last year's crop.

Group production projects have been a valuable aid to our department from the standpoint of community demonstration service, from the standpoint of teaching co-operation in the F. F. A. chapter, and from the standpoint of making money to carry on other F. F. A. activities, but I believe that especially as a teaching device such projects merit much careful study and more general use. It seems from our experience at Sibley that group production projects make individual instruction based on project work very possible and practical.

I do the very best I know how—the very best I can; and I mean to keep doing so until the end. If the end brings me out all right, what is said against me won't amount to anything; if the end brings me out wrong, ten thousand angels swearing I was right would make

Supervised Practice

H. H. GIBSON

Supervised Farming—Yesterday, Today, and Tomorrow?

S. S. SUTHERLAND, Teacher Education,
Davis, California

S. S. Sutherland

THE primary difference between supervised farming programs of yesterday and today is that we are doing today what we talked about ten years ago. Today's performance is in terms of yesterday's objectives. This is not a pessimistic statement, but on the contrary, an optimistic one. For if it be true, today's objectives enable us to forecast tomorrow's achievements.

In an address delivered before the Agricultural Section of the American Vocational Association in December, 1928, by R. D. Maltby, formerly regional agent for Agricultural Education, appeared a concise statement of the desirable characteristics of a program of supervised farming, reflecting the opinions of regional agents, state supervisors, and teacher-trainers thruout the country at that time. Let us examine these objectives of ten years ago in the light of what we are doing today.

SOME CHARACTERISTICS OF A DESIRABLE PROGRAM OF SUPERVISED PRACTICE*

1. A supervised practice program should include one or more major enterprises continued and developed thruout the time the boy is in school.
2. There should be minor cash enterprises.
3. There should be related and contributory enterprises and jobs.
4. Other important farm jobs not included above, including farm shop and engineering jobs, should be involved.
5. The scope should be sufficient to provide adequate training to develop proficiency in the type of farming for which the pupil is training.
6. The supervised practice program should be large enough to require the efficient use of regular farm equipment.
7. The work in connection with the supervised practice program should be performed very largely by the boy himself.
8. The boy should assume financial responsibility for carrying on the program.
9. There should be carefully prepared plans in writing.
10. Accurate records should be kept of:
    a Money transactions;
    b Labor and power used;
    c Materials and supplies used;
    d Important activities and events.
11. There should be careful interpretation of all records and accounts.
12. A new plan should be set up for the ensuing year, based on the interpretation of the previous year's work.

If we are to set up a similar list of standards for supervised farming today, we might change some of these statements and add others. Yet would we not, as teachers and supervisors, be reasonably well satisfied if the farming programs of all of our students and all of our schools measured up, in actual performance, to the objectives of 1928? If so, we should not be ashamed to admit it, for we have come a long way and improved materially the kind of carried on when these standards were first set up.

Let us take a look backward and see how far we have come. Those of you who qualify for membership in "Ten Year" clubs may have some contributions to make to this description of typical supervised farming programs in the "'20's"; but as I recall, they were somewhat as follows:

In the first place, they weren't farming programs, they were "projects"—single enterprises, and quite commonly different ones for each year the boy was enrolled in vocational agriculture. We made a fetish of "ownership" in those days, and looked askance at enterprises in which the boy did not have full responsibility both financial and managerial. They were small in scope. There were departments where the average pupil devoted less than 30 hours per year to his supervised practice program.

We emphasized financial returns. Mottoes such as "$100.00 net profit from your project" adorned the walls of many an agriculture classroom. It did mine. Every boy had a project. He selected it himself, took one in which he was most interested, with little guidance from the instructor or thought as to why he was carrying it. It was a federal requirement; that was enough. Remarkable things, the projects of those days. They were orphans—poor relations. Except for a few intrepid souls who set aside a day a week for discussing project problems, we didn't mention them or think about them in the classroom or the shop. It wasn't done. Thev were inadequately planned, or not planned at all, poorly recorded. The word "analysis" was just a term used by supervisors and teacher-trainers, because we, as teachers, well knew the folly of drawing any worth-while conclusions from the records and accounts found in the average record book.

There was wide variation in the quality of project livestock and crops, probably because we still were dealing with unselected pupils. Project livestock might have been either high quality registered purebreds or scrubs. Many of them justified the words of a supervisor who told me, "Every time I see a lone, scrawny, spotted pig in a dirty, woven wire, ten by twelve pen, I shudder. I'm afraid it will turn out to be some boy's project."

Remarkable, too, was the way these projects vanished into thin air when the boy graduated from high school, or completed his vocational agriculture course. Remarkable, but understandable, because that is what happens to a "requirement" when it ceases to be one.

Please do not think for a moment that efforts of 10 and 15 years ago. If my memory serves me correctly, this is a fairly accurate description of supervised farming programs of that era. At least, it does describe the typical project program of twelve years ago in the agricultural department where the author taught, a department which he hopes was no worse, and which was undoubtedly no better than the average at that time.

Today, thruout the country, the picture is a different one. We have supervised farming programs, more or less intelligently selected, adequately planned, efficiently conducted—farming programs which are a cross section of the type of farming for which the pupil is being trained, and which are recognized as integral parts of the whole program of the training in vocational agriculture which the pupil receives.

Parental co-operation and partnerships are not only accepted but encouraged. Farm programs are commercially sound, planned on a long-time basis, and expand as the pupil becomes better able to accept responsibility. The records kept, while in many cases not all we should like to see, are complete and accurate enough to use as a basis for getting a picture of labor income, production costs, and the information necessary for making interpretations and planning the ensuing year's activities.

In short, we have arrived—at the place we talked about 10 years ago. What are we thinking about today? What are our objectives? To what phases of improvement in our farming programs will we devote our efforts tomorrow?

With the fervent hope that no one will dig this article out of the files of *Agricultural Education* 10 years hence, and bring it back to haunt us, let us list them. Today's objectives being what they are, farming programs of tomorrow should have the following characteristics:

1. The supervised farming program will be selected after the boy has had an opportunity to decide on the farming occupation he wishes to follow.
2. There will be related activities undertaken not only for training, but for improving practices and conditions on the home farm.
3. The farming program will provide not only for acquiring training needed for establishment in farming, but, if possible, necessary capital, land, stock, and equipment.
4. It will be planned, not only for the two, three, or four years which the boy spends in high school, but to continue even after it becomes a full-time farming business.
5. The records kept will be farm accounts; will include records of the entire farming program conducted by the boy; and will, as nearly as possible, be the kind of records which should be kept on an entire farm.
6. The farming program will be based not only on financial data but also on the other factors which indicate efficiency in farming or the lack of it.
7. The farming program will be commercially, as well as educationally sound.
8. It will be supervised, not directed, by the instructor, and the boy encouraged to take as complete responsibility as possible for carrying it on.
9. The supervision will be done by an instructor who has had "occupational training and experience" in the type of farming involved.

If these predictions be valid, we still have some unfinished business. Our objectives don't stand still. As accomplishment threatens to catch up with our goals, we set our sights toward new horizons. Our experience of the past decade seems to substantiate this fact.

This is expressed in the words of James Allan in his poem, "Ideals":

"As you think, you travel, and as you love, you attract;
You are today where your thoughts have brought you;
You will be tomorrow where your thoughts take you. . . .
You will fall, remain, or rise, with your thoughts, your wisdom, your ideal.
You will be as small as your controlling desire;
As great as your dominant aspiration."

Those of us who may sometimes feel discouraged when we see how far our achievements and our procedures lag behind our stated objectives, should take heart from this thought. It seems evident that if today's objectives and ideals for supervised farming be right, we need have little fear for tomorrow's accomplishments.

*"Standards in Supervised Practice," R. D. Maltby, Agricultural Education, April, 1929, Vol. I, No. 4, Pp. 3-4.

Financing Projects

MARSHALL J. SCOTT, Teacher,
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BEFORE discussing methods of financing project work for boys enrolled in vocational agriculture in high school, let us examine the purpose of the work itself. If the bankers are to act as a guiding influence in the financial activities of their customers, they must know the purpose of the business venture and what to expect in the way of permanent returns from that business. The same logic is applicable to the problem of financing Vo-Ag projects.

The ultimate goal of vocational education is a successful man who has found a job fitted to him, in which he is happy, and in which he can be of service to society as well as earn a satisfactory living for himself and his family.

In vocational agriculture emphasis is placed on helping a boy get started toward a successful and happy life on the farm or in a related field of activity. Most teachers are agreed on the theory that actual participation in some type of enterprise on the farm, where the boy can get some practical experience and be guided by the teacher along the right lines, is the best possible preparation for life on the farm. Such a procedure gives the boy a chance to earn

should go back into making his project work larger, and part of which may be used to continue his education if his parents are unable to help him.

Both objectives given above are in accordance with the original aim of vocational education, and particularly agricultural education.

Everything mentioned so far sounds fine theoretically. Practically speaking, however, only about one-half of the parents are financially able and willing to help their boys in any large enterprise worthy of the interest of a red-blooded American farm boy. Frankly speaking, many more might be able to arrange for financing their boys' work, but unfortunately some of them are not completely sold on the value of such work. They feel that the capital which they have or which they have access to has more value in connection with the farm business as a whole, or in providing for some immediate family need.

To get the largest good from a Vo-Ag project the boy must accept the full responsibility for it, supplemented, of course, by advice from his teacher and tempered with suggestions from his parents. When a boy earns or borrows the money for himself he is taking the first step in accepting full responsibility for a project. Entirely too often projects which are financed by the parents are dominated by the parents' prejudices and ideas, which in many cases are contrary to the best interests of the boy and the success of his project. Unfortunately most farmers consider themselves experts in the work which they have been doing for the last 15 or 20 years, when actually they are almost that many years behind the more progressive farmers.

In some cases the best thing for a boy who happens to be born into a family headed by a man who considers himself the final authority in all matters, is for him to be financially independent. Usually he will get plenty of advice of the wrong kind anyway, but is in a much stronger position to use his own judgment.

No one will deny that in some cases a boy will be better off if he is not allowed to borrow money for project work. There are some boys who are not capable of accepting responsibility, and must be told what to do every step of the way. These boys seldom make a success of project work and are a poor financial risk for any lending agency. In our school, just as in real life, our boys consider it an honor to be able to borrow money for project work, because unless they have shown some ability and dependability about other matters they are not eligible to receive a loan of any kind.

It has been the experience of the writer that the most satisfactory projects were those carried on by capital other than that furnished by the parents. It is a real challenge to a boy to know that a business institution has enough confidence in him to lend him the money to finance a good project. Only a very small percentage of boys will disappoint an older person who has tactfully and wisely given them a definite responsibility. It is the job of the teacher to handpick the boys who are worthy of financial assistance, as shown by their previous record in project work, their general interest in farm work and

There is still a sizable group of people who think it is inherently wrong to borrow money. Our explanation that most of our business organizations in this country as well as others are run on borrowed capital, and that borrowing for production is a good thing where it is coupled with sound management, does not satisfy all our patrons. For some reason they confuse borrowing for consumptive purposes with borrowing for production and as a result condemn all borrowing. A good project loan should teach the boy which kind of loans are beneficial and which are usually detrimental if carried on over a period of time.

The organization which is particularly interested in loans made for the purpose of greater or more efficient production is the Production Credit Corporation, a branch of the Farm Credit Administration. It has machinery for making loans for project work in a way that is very educational as well as helpful to a deserving boy who needs financial assistance.

Our chapter of Future Farmers of America has had a very satisfying experience with the Belleville Production Credit Loan Association which serves our territory. Loans are made in such a way that each boy fully realizes his financial responsibility. Wise parents will give their children this worth-while experience even if they could finance the projects themselves. In any case the father guarantees payment of the loan if the project should fail. In that way the father is interested in the success of the boy, but he is in no position to dominate the project practices carried on by him.

In conclusion the writer feels that more attention should be given by agriculture teachers to financing of worthwhile projects. One of the best ways of teaching agricultural finance is to give the boy actual experience in obtaining loans and repaying them when they are due. In the long run more worth-while projects will be developed, with greater scope and with greater teaching value, the kind which are a source of satisfaction to any good teacher.

Book Review

Financing Agriculture, by L. J. Norton, 320 pp., published by The Interstate Printing Company, Danville, Illinois, list price $2.75.

This 1938 copyright book is based on lectures and discussions which have been used in a course in Farm Finance over the past several years. Twenty-three chapters are devoted to credit, loans, land banks, financing farm service agencies, financing co-operative organizations, co-operative financing institutions, the Farm Credit Administration and other financing subjects of interest to workers in the field of agriculture. This book should prove valuable to teachers of vocational agriculture in their contractual relations dealing with adequate financing of farming programs, and should be helpful in presenting the subject of agricultural finance to part-time and evening school groups. A

Farmer Classes

V. G. MARTIN — J. B. McCLELLAND

A Long-Time Program for Part-Time Schools*

V. G. GEIGER, Instructor,
Shell Lake, Wisconsin
and
M. S. MURRAY, Instructor,
Cameron, Wisconsin

RECOGNIZING that the leading industry in both Shell Lake and Cameron is that of dairying, the first three-year course has been built around that one enterprise. Because the enrollment of the classes will be largely boys between the ages of 16 to 25 who have not yet begun farming for themselves and are at home with their Dads, the course has been planned to fit their needs.

Naturally, it might be expected that the first interests of the group will be Dad's dairy herd, how it may be improved, cared for, fed, provided with pasture, how the products may be marketed to best advantage, as well as the selection of better types of all classes of farm livestock and many other kindred subjects. These young men will be interested, too, in getting the training which will help them in later life when they are farming on their own.

Beginning in the fourth year, which will be about the time these young men are about ready to start for themselves, problems of farm financing, management, accounts, and insurance are suggested for study.

In the fifth year, after they have carried on for a year by themselves the interest will logically turn to an analysis of the past year's work, the rotation, crops to grow, soil fertility problems and many others. This year's work has been planned in that direction.

Going into the sixth year of the program we will find the group studying cooperative marketing, social problems, good citizenship, and many others.

It is recognized that not all of the farm problems are contained in the subjects outlined. Many problems are written between the lines, and ample opportunity will be allowed to take them up as the need arises. It may also be impossible to complete the outlined lessons in the time allotted.

The authors suggested that some form of recognition be given those who enroll and carry on thru the course. This might be in the form of an appropriate certificate.

Also it must be recognized that this course may not fit the needs of a particular community perfectly. Some changes may need to be made at the discretion of the instructor.

Several surveys are included to assist the instructor and the student in the planning of the supervised farming program. Adequate plans will need to be made for recreation and such social activity as may develop.

The following steps are suggested as a

1. Discuss the situation with the superintendent of the school and the school board members.
2. Make a survey of the community to locate available boys.
3. Visit as many of these boys as possible.
4. Select a representative committee of these boys and meet with them to plan a course of study.
5. Make use of letters, newspaper articles, and other available methods to get some publicity for the school.
6. Hold a preliminary meeting to determine the desires of the group.
7. Make a survey to show what possible practices may be developed among the boys.
8. Plan to develop a supervised farm training program for each boy.
9. Plan for the development of a recreational and social program.
10. If possible and feasible organize a young men's club among the members.

A little while before the start of the course the following letter will be sent to prospective students. The card giving the time and place of the first meeting will be sent later.

Sample Circular Letter to be Sent to Prospective Pupils

Date

Dear Friend:

Thru this letter we are announcing a new course in agriculture to be added to our high school.

For the past few years we have been planning a course which will fit the needs of our rural young men who are not now in high school and who are working on farms either at home or elsewhere in the community.

We are happy to announce that we have completed plans whereby a regularly organized course will be offered thru our agriculture department to the farm boys of the community. The work will begin early in October and continue thru the winter months. Practical problems in agriculture and farming will be stressed.

We recognize the many problems of the farmer today, and the many responsibilities of solving these problems are of importance to you. We realize that if agriculture is to make progress in the future it must have trained leaders to carry on the work. If our agriculture department can help solve these problems with you fellows in our community we will be happy to help.

There will be no cost to you for any part of the course.

We hope that you and any other farm boy of the community will avail yourselves of this opportunity to study practical problems in farming. You will be notified later of the starting date. We hope you will be with us.

Sincerely yours,
Agriculture Instructor,
Superintendent.

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The following tentative plans have

1. **How can I improve the production of my dairy herd?**
   - *a* What is the average production of the dairy cow in Wisconsin?
   - *b* What does this average production show?
   - *c* How many pounds of butterfat must a cow produce to be profitable?
   - *d* Assuming butterfat sells for 40 cents and Molly produces 187 pounds per year, how much income will she produce?
   - *e* If Daisy produces 300 pounds of butterfat per year, price same, what is income?
   - *f* How much more feed will Daisy eat than Molly?
   - *g* How much more care will she take?
   - *h* If a three year old heifer produces 300 pounds of butterfat what is her mature butterfat equivalent in five years?
   - *i* How will testing improve the production of my herd?
2. **How much butterfat will my cows produce?**
   - *a* Why do I want to test my herd?
   - *b* How is milk tested?
   - *c* How shall I take the sample of milk from the sample bottle?
   - *d* How much acid shall I use?
   - *e* Is acid dangerous?
   - *f* How shall I mix sample?
   - *g* How long shall bottles be whirled?
   - *h* How much water should be added?
   - *i* What is the value of hot water bath?
   - *j* How can I read the test accurately?
   - *k* How should bottles be washed?
3. **How can I tell what my cows are producing?**
   - *a* Can you tell by the appearance of a cow how much butterfat she produces?
   - *b* Have you any indications what the production of the daughter of these dams will be if not tested?
   - *c* How important is accurate weighing?
   - *d* How often should milk be weighed?
   - *e* How should I take an accurate sample of milk from the pail?
   - *f* Of what importance is an accurate sample?
   - *g* If a cow freshens on the 20th of a month and dries up on the 10th of the month at the end of her lactation, how much credit should I give her?
   - *h* How do you figure the milk and butterfat production of a cow per month?
   - *i* How do you figure it for a year?
4. **Am I getting the best production with my feeding methods?**
   - *a* What is a nutrient?
   - *b* What nutrients are necessary in livestock feeding?
   - *c* When you see "protein" on a sack what does it mean?
   - *d* What is the difference between crude and digestible protein?
   - *e* What does protein do in the body?
   - *f* What are carbohydrates and what do they do in the body?
   - *g* What is fat and where does it come from?
   - *h* What is fiber and where does it come from?
   - *i* What is N. F. extract?
5. **What are the thumb rules of feeding? What do we mean by thumb rules?**
   - *a* How much roughage should I feed a 1,000 pound cow?
   - *b* How much grain should I feed this cow?
   - *c* How much silage should a 1,000 pound cow be fed?
   - *d* If I have no silage and a lot of roots how many pounds should I feed?
   - *e* Get from group the rations they are feeding.
   - *f* How can I improve my ration?
   - *g* How can I balance my ration to know my cow is getting the proper amount of feed?
   - *h* Why do I have to consider both maintenance and butterfat production?
6. **How valuable is alfalfa?**
   - *a* What is the protein content of alfalfa?
   - *b* What is T. D. N. content of alfalfa?
   - *c* How does the protein and T. D. N. compare with concentrates?
   - *d* How does alfalfa compare with clovers?
   - *e* How does alfalfa compare with timothy and emergency crops in feeding?
   - *f* Make a chart showing the yield of each hay per acre and compare with alfalfa the protein, T. D. N. (totals and digestible).
   - *g* How does yield of alfalfa compare with other hays?
   - *h* Which is the better hay, first or second cutting?
   - *i* What mineral elements does alfalfa contain, and how important are they?
7. **How valuable are my home grown grains?**
   - *a* Is it necessary to purchase concentrates with home grown grains?
   - *b* What grains should I grow?
   - *c* How does each grain compare in protein and T. D. N.?
   - *d* Make a chart showing yields per acre, weight per bushel, protein, 100 pound lots, T. D. N. and total protein and T. D. N. amounts per acre of oats, barley, corn, wheat, and rye.
   - *e* What minerals do our home grains contain?
   - *f* What value does one grain have over another?
   - *g* Why is yellow corn better than white corn?
8. **How can I balance a ration for my cows using home grown grains?**
   - *a* Get rations from class.
   - *d* Are my cows getting the right amount of feed according to butterfat produced?
   - *e* How can I balance a ration?
   - *f* How much money can I save growing my own grains and not buying?
   - *g* Work out a ration using purchased concentrates.
9. **Am I meeting the mineral requirements of my herd?**
   - *a* What do we mean by minerals?
   - *b* How important are minerals?
   - *c* What minerals are important?
   - *d* What does phosphorus do in the body?
   - *e* What can I feed that will contain phosphorus?
   - *f* What does calcium do in the body?
   - *g* In what feeds can I get calcium?
   - *h* What is the purpose of feeding iodine?
   - *i* In what form am I going to feed iodine?
   - *j* How can I make my own mineral mixture?
   - *k* How much money can I save by making my own mineral mixture?
   - *l* Are the commercial mixtures better than the home mixed?
10. **Am I giving my cows all the care they require for best production?**
    - *a* What kind of care do cows require?
    - *b* What effect does keeping cows out in cold weather have on production?
    - *c* Will water in the barn have anything to do with production?
    - *d* How does time of feeding affect production?
    - *e* What effect does time of milking have on production?
    - *f* What temperature should my barn be for best results?
    - *g* How many cubic feet of air should be allowed each cow?
    - *h* What effect does ventilation have on production?

(Continued on page 198)

Sardis Farmers' School

W. F. HOLLAND, Secretary,
Sardis, Tennessee

THERE has been much talked and written about how the farmers in a community should study, plan, and work together as a unit; but to most people this situation is just another Utopian dream that will never come true. However in the Sardis Community, which is located in the extreme southern part of Henderson County in West Tennessee, this long-talked-about dream has become a reality.

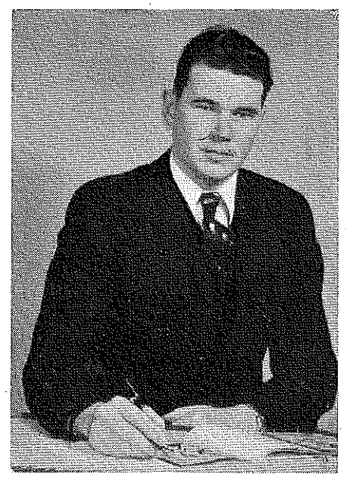
The success of this co-operative movement is due largely to the attitude and initiative of the farmers; the untiring efforts of Ben Douglas, who came to Sardis six years ago as its first agriculture teacher, being selected master vocational agriculture teacher of Tennessee in 1935; the capable leadership of his successor, Hollis B. Franks, who graduated from the University of Tennessee last year and the able assistance of Miss Rubye Smith, home economics instructor in the Sardis High School

When Mr. Douglas came to Sardis six years ago, he found a typical large rural community of today in which cotton was grown to furnish practically all of the cash income, with corn and relatively small amounts of lespedeza and other legumes grown to furnish feed for the livestock. There were practically no winter cover crops grown or any good permanent pastures. The land was badly eroded, with little effort being made to check erosion. The farmers were unorganized but willing to follow the capable leadership of Mr. Douglas.

In January 1933, classes were organized in which farmers met each week, studied, and discussed their most important problems. These were concerned principally with those of checking soil erosion. Methods were proposed whereby the present practices might be improved in planning and carrying out a good farming program. Very few farmers attended the first series of lessons. However the interest of the farmers grew from time to time and the membership of the Sardis Farmers' School gradually increased until by the end of the first series of lessons, which was in March, there were 50 active farmers in the school who proposed to carry out one or more improved practices on the farm the following year. Since then, two series of meetings have been held each year, one after the crops are laid by in the summer and before harvest time in the fall, the other after the harvest in the fall and before the work in the spring season begins.

The interest grew and the membership gradually increased until a total of 236 was reached in 1935. By this time, many farmers were carrying out many improved practices to conserve the soil and establish a more economical and sound farming system.

In the meantime, the women of the Sardis Community with the excellent leadership of Miss Rubye Smith, home economics instructor in the Sardis High School, organized a class which is functioning similiarly to that of the men. Beginning with a few wide awake mem-



Hollis B. Franks

bers at first, the class has grown rapidly, made much improvement and accomplished many worth-while things in the community, and is probably the most outstanding organization of its nature in the country.

As customary, the farmers met in the early part of the past winter, elected officers for the coming year, and outlined a new series of lessons under the leadership of Mr. Franks, the present teacher of agriculture. There were only 22 members present at the first meeting which climaxed a slight "breathing spell" the organization had undergone the past year. Then, the interest and membership of the Sardis Farmers' School advanced rapidly, and a new peak was reached in total membership of 366 during the first series of lessons this year. Probably by the end of the second series of lessons for the year, the membership and interest will expand to some more near-by communities and a total membership of 400 or more will be reached. The average attendance dur-

ship in the Sardis Farmers' School is that those applying for membership be interested in studying, discussing, and carrying out those methods and practices which will improve the present practices carried out on the farm.

At present, the members of the Sardis Farmers' School meet each Tuesday night in the Auditorium of the Sardis High School Building. Usually the ladies and men meet separately for a discussion of their respective problems. However, occasionally a joint discussion is held when problems of vital interest to both men and women are discussed.

The Sardis Farmers' School functions as any other business organization with the president opening the meeting, followed by the secretary calling the roll, and the transacting of business, which is done strictly according to parlimentary procedure. Then the meeting is turned over to the leader of the discussion, who is usually the agriculture teacher, and a round table discussion of about one hour in length follows. The principal contribution of the leader of the discussion is the presentation of prepared charts or film strips on data from experiments carried out by the experiment stations. After the discussion the farmers are asked by the leader to propose improvable practices and a record is made by the secretary of those enlisting in the improved practice. The local supervisor later uses this record in his follow-up work.

With the president or chairman of the social committee in charge, a social period of about 30 minutes to one hour usually follows the discussion, with the men and women meeting together. The recreational period is usually composed of music furnished by local talent and, occasionally, radio artists. The program also consists of various contests in which prizes are given by the merchants of Sardis to the winners. One of the most interesting contests held this year was the hog calling contest. The merchants co-operate almost unanimously and wholeheartedly in promoting the work of the Sardis Farmers' School.

Usually in March at the close of a series of discussions, the Sardis Future Farmers of America Chapter sponsors a banquet and invites all of the members of the Sardis Farmers' School. The farmers eagerly look forward to this festivity and consider it the most glamorous social function of the year in the community.

This year the members of the Sardis Farmers' School have proposed, with each member contributing a specific part, to carry out more improved practices than ever before. Among those which have been carried out or proposed to be carried out are: Set out 322,000 Pine and Black Locust seedlings, sow 1,051 acres in winter cover crops, terrace and maintain terraces on 1,210 acres of land as compared to 500 last year, build 82 brooder or hen houses, secure 100 registered hogs for foundation breeding stock, feed balanced ration to 68 flocks of chickens, and plan and provide for year-around garden on 206 farms. A total of 38 different improved practices has been proposed for the year, with a scope comparable to those listed above.

The sentimental expression and determination of the members of the

L. B. POLLOM

Farm Mechanics

Some Objectives for Farm Mechanics in Vocational Agriculture

C. H. VAN VLACK, Extension Agricultural Engineer,
Iowa State College, Ames, Iowa

C. H. Van Vlack

TO ATTEMPT to discuss the major objectives for a course in farm mechanics briefly would be very presumptuous. Let us be content to confine our thoughts to one or two objectives or phases of a rather general objective, which seems to be taken for granted to such extent that it is often overlooked altogether. What should a course in farm mechanics in the high school department of vocational agriculture do for the boys and for the community? We need not reflect much, think less, and reply on the spur of the moment almost as tho prompted by tradition, to say that the course should develop in the boy manipulative skills, habits of neatness, order, and precision, creative thinking ability; develop appreciation of good tools, well repaired machinery, and buildings, and so on thru the usual list.

Surely these are worth-while achievements for the individual but do they alone make for the greatest possibilities? What do they do for the community? Of course, they help in some measure, tho indirectly, in raising the standard of living on the farm, one of the ultimate objectives. But is not the goal, if and when reached, achieved over such an indirect route and in such small measure that many possibilities have been lost—such as building ideals and appreciations for a modern farm home, equipped with and surrounded by those conveniences which turn drudgery tasks into interesting jobs. Is not the opportunity to motivate the development of the manipulative skills and true creative thinking often lost thru lack of a sustained interest in attaining finer satisfactions in life thru better homes and home environment?

True it is that one of the major phases of the farm mechanics course, farm machinery adjustment and repair, thru its objectives—namely, economy of power, economy of labor, improvement of labor conditions, and reduction of machinery costs—contributes to a higher standard of living on the farm indirectly thru greater efficiency of farm operations and directly thru improved labor conditions. But how much more worth-while this part of the program could be if it were definitely tied up with the goal of a higher standard of chinery repair would create interest in other phases of the course and would not seem to end in the machine shed. We would not have to lament the fact that it is hard to find interest in the installation of simple water systems. As a part of our concrete construction we would not face the want of interest in the planning and building of a sewage disposal system as a practical exercise, which would at the same time develop skills and the highest order of thinking under the most favorable situation as concerns motivation.

Can we not let the development of manipulative skills, important as some are, be incidental to the building of appreciations and ideals for the best in living? May they be the means to an end? This does not mean a great revamping of the present program and curriculum of farm mechanics. Much of the present is essential and fundamental if, in most cases, the emphasis can be redirected.

What course in high school offers to the farm boy as great an opportunity for the development of true creative thinking and an outlet for individual expression as does a well-directed program of farm mechanics when the ultimate goal is that of a better farm home and home enviroment? What other course even deals with the home and living conditions on the farm?

Why Study the Farm Home?

It is needless to pause to consider the need for improved housing conditions in rural America. Any and all of the recent state and federal surveys reveal the situation with which all agriculture teachers are familiar.

How shall we proceed to build interest and arouse consciousness of the need for and the possibilities of the improvement of the farm home situation?

Why not make the approach thru a study of home values? Trite as is the saying, "Home is where the heart is," all recognize it as a fundamental truth. Someone has said that half the trouble with the "younger generation" is that there are not enough open fires, indicating quite well the absence of home-like atmosphere in which many people are now living. The hurry and bustle of our lives, the urge to "go places and do things," the movies, and the automobiles are all factors in the crowd complex.

All this may seem beside the point but is simply going deeper into the subject than its material benefits. Of course, the pair and modernization of the home (also other buildings) and even construction when situations and economic conditions justify? High standards of building should be incorporated including durability, home comfort, convenience, and approved design. Well-improved farms can be visited, house and building plans can be studied, farm conveniences can be noted and compared, and frequent reports on pupil observations encouraged.

The needs and possibilities thus realized will provide adequate motivation. The development of shop skills may be incidental to greater achievements. The whole building maintenance, repair, and construction program of the farm will be a challenge. It has been well said that if a farm mechanic's course is to be educational, it must contribute more to the boy's mental development than to his manual training, and that if we would develop the boy's ability to think, we must provide opportunity for him to do some thinking. It might be added that no better thinking can be provided than that of the creative type which has been provoked by a challenging true-to-life situation.

But we are here confronted by the objections that this is no time, economically, to proceed with a forward-looking building program. It is argued that when better times come, farmers will naturally turn to building repair and needed new construction.

Will Better Farm Buildings Be Built?

Professor R. C. Miller, Ohio University, in a recent address, "The Battle for Adequate Farm Building," made a significant observation: "The serious farm building replacement and repair problem seems to have a rather simple solution, if the universal answer given to the question is any real answer; that is, 'Give the farmer a better price,' or sometimes stated in the form, 'Give the farmer a profit and the buildings will be taken care of.' There is no doubt but that more farm income would make the building problem easier to solve and for some farmers it would be the solution, for it does require money or capital to purchase some of the necessary materials and skilled labor.

"There are several good reasons, however, why the better farm price does not solve the building problem. One reason is that the buildings were neglected almost as much during the period of high farm prices during and for 10 years following the World War, as they have been during the past four years of depression prices. The result of the Rural Housing Survey conducted last winter indicated that most of the repairs and improvements needed are of longer standing than the last few years. If, then, the high farm prices during and for the 10 years following the World War did not correct the building repair and replacement condition, is there any reason to hope that they would be the price reason is likely not to be a solution of the farm building problem is that we have no assurance that farm prices will be appreciably better regardless of the fact that we all want better prices. It seems reasonable to assume that we cannot expect as high prices in the next 15 years as we have had in the past 15 years. If we can learn from the past, the lesson certainly is that the prices move in cycles and that over a period of years they average about the same. Regardless of what the farm price may be, we need good buildings. Usually the poorer the prices the greater is the need for better buildings. When the farm prices are low a margin of profit can be attained only by efficient production which usually means better structures. Also, low prices mean less money available for heating the home and paying the doctor. At such times a modern well heated and insulated house is the cheaper way.

"A third reason why better farm prices are not a solution to the building problem is that such an answer is likely to be an excuse for not having done anything, or doing anything now, rather than a method of solving the problem. There are, no doubt, many problems in our lives that we can solve by simply giving a good excuse. But excuses, even tho the excuse is a really good one as it is in this case, for we all know that farm prices and income are extremely low, will not build or repair structures.

"If, then, we are convinced that better farm prices are not a dependable ally but are possibly an enemy insofar as they are an excuse that keeps us from action, are we not ready to abandon the false hope of financing structures thru better prices and to conduct a campaign that will finance adequate structures in spite of the price conditions?

"With the price excuse somewhat tied, so it is harmless for the time being and placed in the background, let us give a little thought to what is required to do building and replacement. It is evident that it requires materials with or from which to build. Many of these materials are available on the farm with no cash cost. There is the ground in which we can dig such structures as storage cellars, and trench silos, where often no other material is used. Many farms have woodlots where all kinds of timber, from framing to finished lumber of the best quality, can be obtained at no cash cost, or at least a very low cost. Lumber that often costs $75.00 per thousand board feet in a lumber yard can be obtained from the farm at a cash cost of about $7.50 for the sawing. Sometimes even the sawing can be done on shares so there is no cash outlay. In many cases the logs may be used in the same manner as the pioneers used them, and as our wealthy folks like to construct their country homes. The log building is by no means the poorest type of structure we can have. It has many merits such as sturdiness, long life, and insulation, that our flimsy frame structures do not have.

"Many farms have stone and rocks that are available for the labor of gathering them. There is no more permanent and better appearing material than the rock native to a locality. Even if we had no wood or stone, we still have clay from which the highest class of building brick and tile could be made. Many of

Observing Fundamentals in Shop Training

LESTER B. POLLOM, State Supervisor,
Topeka, Kansas

L. B. Pollom

THERE is perhaps no known best way to organize, conduct, and maintain a course in farm mechanics. Each individual teacher will rightfully be guided by his own experience, observations, likes, and dislikes. It is probably safe to say, however, there are some fundamental principles that should be observed regardless of factors involved in determining the general shop procedure.

It is not contended the following suggestions constitute a complete list of points to be observed; nevertheless failure to recognize them may directly or indirectly bring about problems difficult of solution. It is anticipated every shop will reflect the ideas, ideals, and individuality of the instructor. That is as it should be. The following points are presented for the teacher's consideration, given a shop of sufficient size and convenience.

1. Maintain the best and most practical tool equipment possible.

2. Equip at least to do the mechanical work done on the best farms of the community.

3. Organize the shop for convenience and efficiency.

4. Conserve as much space for work area as possible.

5. Provide for adequate, neat, and convenient tool storage. Whether you use tool room, departmental cabinets, or a combination of both is for you to choose. "You are the cook and for the time being it is your kitchen; you are the one who is going to work in it." (Caution is suggested against making expensive changes suddenly.)

6. Make provision for a systematic way of storing and disbursing supplies: bolts, screws, paint, nails, lumber, etc.

7. Have a definite plan for accounting and collecting for such material. Be sure the plan is understood by pupils.

8. Have the shop and its equipment in first class order when school opens.

9. Have a definitely thought-thru plan for teaching each of the fundamental skills of each enterprise.

10. Avail yourself of every opportunity to TEACH.

11. Use as much class and group instruction as is practical. Frequently a bit of information or demonstration of a skill can be gotten over as quickly to a class or to a group as to an individual. Remember: The amount of work turned out in a year's work may not always be an index to the amount of teaching accomplished.

12. Provide an abundance of illustrative material for all shop enterprises. (Many commercial concerns have such material for free distribution). Many pupils who do not readily understand verbal explanations will grasp a thing

13. Before going to the shop for the first time have a well thought-thru plan for justifying to your class the work in farm mechanics.

14. Boys should understand the relationship of mechanical skill to successful farming. Make this brief but emphatic.

15. Impress upon the class continually such things as precision, accuracy, industry, neatness, respect for tools, etc.

16. Explore the shop to acquaint the class with the general layout. They should know where tools and supplies are kept. Boys should know their responsibility in case of lost or broken tools.

17. In a systematic way, by a carefully-thought-thru plan, acquaint the boys with the various tools, their adjustment, operation and care. (It would perhaps be well to begin with the more important, most commonly used tools.)

18. Accustom your boys to the habit of studying and thinking as well as carrying on tool operations. Unless this is done mechanics principles may be neglected. We are striving to develop intelligent "doers" with initiative and self-reliance. Boys must understand principles if they are able to think out things for themselves.

19. Make every effort to acquaint yourself with the inherent or acquired skill and ability already possessed by each boy and try to adapt the work as rapidly as possible to the ability of the individual. Boys do not develop when working at tasks below their level of ability. It is progress, growth, and development we are seeking.

20. Decide on a grading system to be used in the shop and determine its relationship to the grade in agriculture if a common grade is given to cover both shop work and work in agriculture. A point system of grading has much to recommend it. In grading the efforts of a boy one should not overlook the item of progress and improvement. The most awkward boy in the class may make the most progress and improvement and still be below the average of the class. He should be encouraged. The grading system should do justice to the boy who is energetic, ambitious, and resourceful enough to bring plenty of worth-while jobs of suitable range from his project and the home farm as against the boy who habitually depends upon the teacher to find him something to do.

The importance of a definite home farm checkup carried out if possible by the boy, the parent, and the teacher, for the purpose of listing specific shop jobs, cannot be overemphasized. In making such surveys the boy's shop ability should be kept in mind whether he is a beginner or an advanced pupil.

Definite provision should be made to get the jobs to the school shop even to the point if necessary of organizing "pick up" days on which two to four boys living in the same direction from town thru the use of a truck or trailer, and if necessary on school time, assist each other in loading and bringing to the shop the jobs located in the previous checkup. Many of those jobs may be of such nature that it requires two or more boys to load them.

The teacher should provide for and encourage boys to carry out shop jobs that cannot be brought to the shop. Remember the importance of applica-

Future Farmers of America

Training the New Officers*

L. R. HUMPHERYS

LESLIE NELSON, Instructor,
Brigham, Utah

Leslie Nelson

TRAINING new officers in the local chapter of Future Farmers will always be a live problem. The membership is like a "walking congregation." Members come and go. There are good officers and poor officers. There are bright spots and dull spots in the life of the local chapter. Efficient officers must "be grown"; they do not "just happen."

Attention has been called in previous articles of this series to the need of selecting officers in terms of the individual needs of the several offices. Emphasis also has been given to the importance of selecting officers before the end of the school year, well ahead of the time set for installation of chapter officers. If some time elapses between the annual election and the time of assuming active service, a training program can be set up to fit the needs of the several officers. A part of the responsibility of the local adviser, then, is to visualize the need of providing a specific training for the several types of leadership and the organization of a program suited to these needs.

Possibly the most valuable single aid in the officer-training program is the aid that can be given the *new* officers by the *out-going* officers. Somehow boys have a language all by themselves. If they deliberately devote themselves to the task of transferring knowledge and experience, much good will result. This value can be realized most effectively by encouraging the officers-elect to sit in with the active officers for both chapter officers and membership meetings to get the "feel" of the workings of the organization.

No organization can be efficient unless it provides an opportunity for its members to meet regularly and deliberate in the proceedings and share in the responsibility of the control of the organization. This means that a regular time should be provided in the schedule of classes for chapter meetings. Furthermore, the officers of the chapter must meet regularly if they are to function effectively. Such meetings should be held during the school year at least once each month and preferably once each two weeks. If too much time lapses between meetings, interest lags and group consciousness fails to develop. Well-planned Future Farmer meetings have definite educational value; they are a part of the learning process and can be justified as a part of the school activities. Regular

very best "training ground" for old and new chapter officers.

What has been said about the need for a regular time for chapter meetings applies with equal emphasis to officer meetings. If officers are to understand their jobs and have an efficient working relation, they must meet often and discuss problems, "plan their work, and work their plan." It may be difficult to secure regular school time for the officers' meetings. However, the adviser can, and very often does, use one of the lunch periods for an "officers' meeting." In one case, familiar to the author, the agricultural class room is used during the lunch period for the officers' meetings. The door is locked, the officers bring their lunch and very often a few peanuts, apples, doughnuts, or some other delicacy help to socialize the meeting and the officers enter into the task wholeheartedly. The new officers will learn much from the old officers by attempting a few such meetings. The adviser will be on the job and take every advantage of acquainting the men with the details of the several responsibilities.

The alert adviser will see to it that all officers, new and old, become thoroly acquainted with the F. F. A. constitution and by-laws, chapter organization procedures, the program of work for the current year, the chapter records and property, chapter traditions, and procedures. After getting acquainted with chapter organization, a deliberate effort should be made to provide basic training in parliamentary procedure. This type of training should characterize and be a part of every meeting, official and unofficial.

A very clever and effective method of teaching parliamentary procedure was the use of a "Parliamentary Skit" by the Bear River Chapter of Future Farmers of Garland, Utah. The skit took ten minutes for rendition, was full of humor in portraying a meeting of farmers in a typical farm community. Twelve Future Farmers participated in the skit. In this short time nearly 30 different parliamentary procedures were brought out with both correct and incorrect usages. Each situation was characteristic of typical assemblies. In every chapter there will be some enterprising member who can write such a skit and the whole student body may be amused and receive much good.

Another helpful training procedure of this type is to see to it that either the *adviser* or some competent student acts as parliamentarian to advise the presiding officer and others concerning their rights, duties, and privileges as participating members in group meetings. In this connection officers and members alike should be encouraged to familiarize themselves with one of the several pamphlets dealing with parliamentary procedure. By following these practices for a few months, the member will readily acquire the ability to properly

Most of the procedures suggested thus far have dealt with group meetings. It should be noted that much effective training can be given by each *outgoing* officer to his successor. The officer will grow with his assignment and the apprentice will take pride in his new accomplishment. For instance, the outgoing secretary can give his successor much help by going over the record books, explaining how minutes are to be kept, records are to be made and preserved, and so on. Likewise the president, treasurer, marshal, and other officers can be coached by the corresponding outgoing officer. All of the above suggested procedures call for careful planning on the part of the adviser.

Many other types of help are being used in different parts of the country today; among these are state and district leadership conferences. Possibly the most common practice in leadership conferences is to devote one, two, or more days to leadership training during state or district conventions. Such leadership conferences are most effective when a large percentage of the new officers of the territory are in attendance. The success of such leadership training conferences depends upon careful planning and extensive participating experiences for the members in both general assemblies and in sectional meetings for the different officers concerned.

Considerable preparation is needed for the arrangements of a leadership training conference. Many of the participants come a long distance. They must not be disappointed in what they expect and need.

The success in training officers for leadership in the State or local Future Farmer organization will depend in a large measure upon the vision of the local adviser, his ability to plan and initiate real leadership training, and to delegate responsibility to members who are in a position to serve.

*This is the fourth of a series of articles on guidance of F. F. A. Chapter activities.

Some Do's and Don'ts for Future Farmer Sports Programs

FRANK B. FINNERTY, Advisor,
Addison, New York

MANY instructors in vocational agriculture lack a hub around which to focus their Future Farmer activities. Unless one has focal points to which the interest of the members can be directed the program is apt to be dull and uninteresting to the majority of the boys.

Many instructors have overcome this lack of interest in various ways. Different groups, due to physical set-up, school administration, and type of pupil, must be handled differently. Often instructors have overcome these difficulties; just as often they have failed.

Over a three-year period, we have built our F. F. A. program around a well-conducted sports program. During

experience some of the do's and don'ts of such a program.

After registration in the fall a meeting is called and various committees are appointed, among them the sports committee. This committee arranges for the year's sports program. This program consists of track meets, softball games, kite flying, model airplane racing, quoits; in fact anything that two boys want to do can be made into a contest, even milk-testing and poultry culling.

Most of the freshmen boys come from rural schools and our F. F. A. program is relatively unfamiliar to them, but they have had some experience with some form of ball or running. Once they have participated in an organized sport, the jump to parliamentary procedure and other official business is less difficult. Where a point system is used in making awards at the end of the season, the best model airplane racer should receive just as many points as the best basketball or softball player.

THE ideal sport is one that will include the greatest number of participants. Track is probably the best sport for this purpose, if enough events are included and each event is given the same weight in points. The over-grown lumbering boy may not be the best quartermiler, but in the tug-of-war he will give a good account of himself. The pint-size freshman may not gain a place on the tug-of-war rope but in the hop-skip-and-jump event he will come into his own.

By having events in which all boys can participate, those less skilled are not left out, and they feel that they too have contributed something worth while to the organization.

Softball is also an ideal game which will give every boy a chance. Of course the rules say only 10 men on a side, but if you have 22 or more, play them all at the same time. Use five outfielders, two short stops, then all the boys have just as much fun and it doesn't slow the game down as it might appear to.

Track and softball require but little equipment, a pair of sneakers, a broken bat from the varsity team, a softball—and you are set to go.

We are fortunate in having an agriculture building which contains a basketball court. This is used mainly for agricultural students. Hence, basketball is our main sport.

Many instructors criticize basketball because it doesn't have much carry-over value. This is true, but young, energetic boys must have some active sport to use up their energy. Another criticism is that they cannot use a sufficient number of boys during practice. This objection is easily overcome. Pick your team of five boys and let them score against the rest of the players. This speeds up the play and if the team can score against eight or nine players, the opponents' five won't be so difficult to score against. The same is true on defense. Let all the rest of the players try to score against your regular team.

Occasionally I have heard fellow teachers boast of the greatness of their F. F. A. teams. "We can beat the high school varsity if they would play us" is a common statement. The surest way to eliminate sports from your F. F. A. program is to make someone else on the

partment is just one cog in the wheel of the school, not the whole wheel.

If because of some disagreement between the coach of the varsity team and a player, the latter is fired from the team but is eligible to compete for the "Ag" team, do not use him. "If you cannot play for the coach, you cannot play for me" is the safest way to keep harmony in the various school departments.

Many teachers dread the thought of having any F. F. A. team because they have only a vague knowledge of the sport. Usually the varsity coach will be glad to help.

Certain instructors frequently complain that if they do develop a fairly good F. F. A. team some of the players will go on the varsity squad the next year. This, I believe, is a worth-while activity for which to strive. Certainly if a boy is good enough to play for the varsity he should be encouraged to do so. This will make a place on the F. F. A. team for other boys. It also repays the coach for any help he may have given your team.

Keep the game as simple as possible. Do not try to teach everything. A teacher remarked to me during the height of basketball season, "I think I will defeat you Thursday night. I taught my team five new plays last night in practice and if they click it will be a cinch." A regular coach working with his team constantly finds it difficult to teach five different plays in an entire season. Let's not do it in a single night.

Don't be afraid to have a losing team. Take a note from the coaching fraternity handbook: "When you are winning, you are a good coach; but in your poor years, you are building character."

ENJOY the sports program rather than dread it and you will have many pleasant surprises. Two years ago during a track meet a sturdy-legged, barrel-chested youngster, John, came to me and said: "May I run in the half-mile event?" As I had only one entry I answered in the affirmative. Then the master-mind started working. "You start and run just as fast as you can and the rest may follow you" were the instructions given. "This will let Ray, our other entry, romp home easily." The starter's gun barked, the runners were off. John followed instructions. I watched him for the first quarter mile and he set a terrific pace. The other runners were puzzled. At last one by one they set out in mad pursuit. Then I picked out Ray running calmly in the rear of the group. At the three-quarters pole he suddenly spurted. One by one he overtook the other tiring runners, and as he came to the home stretch, he seemed to have the race won easily. But out in front still running smoothly was John, and he hit the finish line five yards ahead of Ray. John came over and said sadly, "Gee, Prof, I forgot to slow down and let Ray win."

Sports should be a minor part of the F. F. A. program. Do not let your organization become a basketball team while the worth-while activities are crowded out. Too much emphasis on sports is much worse than too little. However, there is an in-between path which will give real satisfaction if fol-

National F. F. A. Notes

L. R. HUMPHERYS,
Logan, Utah

American Farmer Applications

A SUPPLY of printed American Farmer application blanks was forwarded January 1st to States from the National F. F. A. Office. Complete instructions are attached to each individual blank and many improvements have been made in the 1939 setup. The completed applications are due in Washington *on or before May 1 and no additional material will be accepted on any candidate thereafter*. States will be notified 30 days before the next national convention in October as to the candidates which will be recommended to the delegates for election. The new score card has a total of 1,000 points.

Chapter Scrap Book

An official chapter scrap book has been designed and may be secured from the French-Bray Printing Company, Baltimore, Maryland. This scrap book, which is 14 inches x 20 inches and looseleaf, is suitable for clippings, snapshots, and other appropriate materials.

National Chapter Contest

Over 700 entries for the 1939 Chapter Contest are now on file in the national office. The highest percentage of participation is shown in Louisiana, Florida, and Virginia.

National Public Speaking Contest

Speakers will be scored this year on the basis of 1,000 points rather than 100 as has been the case in the past. The items and weighting of the score card remain unchanged.

Membership

Preliminary reports indicate that the national organization of F. F. A. has a good chance of reaching the 1939 goal of 200,000 members. Substantial increases are evident in all four regions of the country.

National Leadership Training

The national officers of the F. F. A. met in Washington, D. C. February 9–16 for special instruction on leadership. This is the first year such a school has been held. As a result of this training, officers will be able to render a greater service to States and will be better prepared to handle the coming national convention.

Participation Certificates

A supply of participation certificates has been secured by the national organization. Starting with the year 1928 these certificates, with the proper signature, will be issued to outstanding State Associations and chapters, individual members winning signal honors, and to the national officers. This practice will likely be continued in the future.

I'd like to think when life is done
That I had filled a needed post,
That here and there I'd paid my fare
With more than idle talk and boast,
That I had taken gifts divine,
The breath of life and manhood fine,
And tried to use them now and then

Some Objectives

(Continued from page 195)

our present brick farm houses are made of brick that was dug, moulded, and dried or baked right on the farm where it was used. There is a possibility that earth could be used in the building material. Almost every farm has some of these low cost materials available.

"Labor is an item which in barns usually amounts to about 25 percent and in houses to 50 percent of the cost of the structure. Much of the labor necessary to do building repair and replacement is not so highly skilled but that some farmer can supply it. It may mean an exchange of labor and not an expenditure of cash.

"Possibly the most difficult financial problem in modern construction is the hardware and what we term the modern conveniences such as electric power and equipment, bathroom, furnaces, and kitchen equipment. Even much of that can be installed at a much lower cost on the farm than in the cities. For example, the cost of obtaining water piped into a city home and the cost of a city sewer to a city home is usually considerably more than the cost of obtaining water and installing a septic tank with the necessary sewage disposal system on the farm.

"Those who say that building repair and replacement cannot be carried out at low farm prices usually do not take the above factors into consideration and do not observe that there is usually someone in every community who is doing it right now.

"There is need, no doubt, to further locate the enemies to adequate structures to find ways of waging a successful battle. It is evident that no quick and easy scheme will bring adequate structures. It will be a hard, long, in fact almost a continuous battle. Our methods are simple as pointed out but the way is not easy. It will require a constant drive in education and appreciation of the services rendered by the buildings to agriculture as an industry and mode of life."

What Farmers Really Want

Extension service specialists are receiving hundreds of letters asking for help to repair and remodel. A considerable inquiry is for plans for new construction. A desire to prevent excessive depreciation together with the feeling that better times are here, or close at hand, has stimulated interest.

Again, never has more money on a long-time basis been available at such low interest rates. The Federal Housing Administration has come to the rescue and is doing everything possible to make it easy for farm owners to stop increasing depreciation losses and to enter into a program of providing themselves with better homes and living environment.

But should vocational agriculture teachers pioneer in this phase of education? Should they build appreciation and desires in the farm boys or adults for those things which so few are unable to enjoy? Should there be a "Confirmation to conditions" rather than what might seem desirable? Are conditions

read John Dewey on the responsibility of the schools for the new social order and consider whether the analogy holds. He holds that: "The schools of America have furthered the present social drift and chaos by their emphasis upon an economic form of success which is intrinsically pecuniary and egotistic." "The part the schools will take in determining social ideals depends," he says, "upon whether teachers passively accept existing conditions, or throw themselves in with forces and conditions that are making for changes in the social order."

Not all great educators agree as to how we should build for a new environment or social order. President Robert M. Hutchins, of the University of Chicago, says, "The pupil must be taught to earn a living in the society that exists and not in the one that ought to exist sometime. He must be made a good citizen of this commonwealth and not of another, no matter how much better the other may be."

Or we may quote Doctor Glenn Frank, "The nation's schools owe their students and the public something more than a neutral listing of the dilemmas of our time. Schools must set lamps burning in those dark places where social decisions falter for want of light. The nation has a right to expect from the educators candor of judgment upon even the most controversial issues."

Possibly the new era in farm life is here. Farmers are becoming more home-conscious, and the former ambition of many of them of retiring and moving into some town is giving way to living on modern farms instead of in the cities.

One widely traveled agricultural leader observed that "For perhaps the first time in history farmers are giving more thought to their houses and to their own living conditions than to their barns, other buildings, and equipment, which heretofore received first consideration."

A Long-Time Program

(Continued from page 193)

11. How valuable is pasture?
- *a* How valuable is permanent pasture? Temporary pasture?
- *b* Is it advisable to have only permanent pasture?
- *c* How much pasture is needed per cow?
- *d* What nutrients does pasture contain?
- *e* Does permanent pasture have same feeding value thruout the year?
- *f* How can I increase productiveness of my pasture?
- *g* Is it necessary to feed any grain while cows are on pasture?
- *h* Should a permanent pasture ever be fertilized?
- *i* What can I do to keep permanent pasture productive until I can get enough land under the plow to have a pasture rotation?

12. How can I provide my cows with continuous pasture?
- *a* What are crops that will make good pasture?
- *b* Which of these pastures will carry the most cows?
- *c* How can I rotate these pastures to get the most out of them?
- *d* What are the feeding values of each of these grasses?
- *e* How can I plan a rotation to have continous pasture?
- *f* Do I need to feed grain when cows are on continuous pasture?

Proposed courses for following years:

Second year—How can I improve my herd thru breeding?

Third year—Producing and marketing quality dairy products.

Fourth year—The problems of getting started in farming.

Fifth year—What are some farms suc-

Sixth year—Selling and purchasing co-operatively.

*Prepared for the class in Methods in Part-Time Classes in Vocational Agriculture under the direction of Louis M. Sasman, Assistant Director and Agriculture Supervisor, Wisconsin State Board of Vocational Education, at the Colorado State College summer session June 20 to July 9, 1938.

Observing Fundamentals

(Continued from page 195)

tion of training to home farm situations.

One cannot begin too early encouraging each boy to collect, condition, and store the tools of the home farm in a convenient place. The provision of a work bench for the home farm which the boy might build in the school shop with old lumber if necessary is an important step toward carrying the shop work to the home farm. If housing for such tools and equipment can be provided on the home farm so much the better. Most boys will take pride in a chest of well-kept tools of their own. They should be encouraged to make such a collection.

A record or progress chart is recommended, to be posted in an accessible place in the shop with the names of pupils and skills listed. As minimum requirements required by the teacher are met by the various individuals they should be checked. By so doing each boy may readily check on his own accomplishment from day to day.

It is hardly necessary to say that job study of guide sheets should be provided for all required jobs or skills. It is perhaps as important that a boy find out why as well as how, altho it may not always be easy to convince him of this. There are limits beyond which we cannot go in permitting boys to follow their own inclinations, if a good job of teaching is done.

Vocational Agriculture and A.V.A.

(Continued from page 183)

and procedures, as a means of crystallizing the tested experience thruout the nation in providing adequate vocational training in agriculture. This committee dealt with such problems as continuing education of teachers in service, maintaining sound relationships in administration, maintaining desirable working relationships with adult farm and related organizations, providing guidance and leadership for national, state, and local units of the Future Farmers of America, increasing the services of the departments of vocational agriculture in public schools by extending the program of adult education in vocational agriculture, making systematic studies of problems in vocational agriculture, increasing the services of public schools to out-of-school farm youths, and developing wholesome attitudes and techniques of co-operative effort. All these things are discussed in Monograph 19.

The American Vocational Association is your association. Its effectiveness will depend upon your interest and your loyalty. May we all work together for a greater A. V. A., and a more adequate and more effective program of vocational education in agriculture.—R. H. Woods, Director of Vocational Education, Frankfort, Kentucky, and president of

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