

Stories in Pictures

ROBERT W. WALKER
University of Illinois

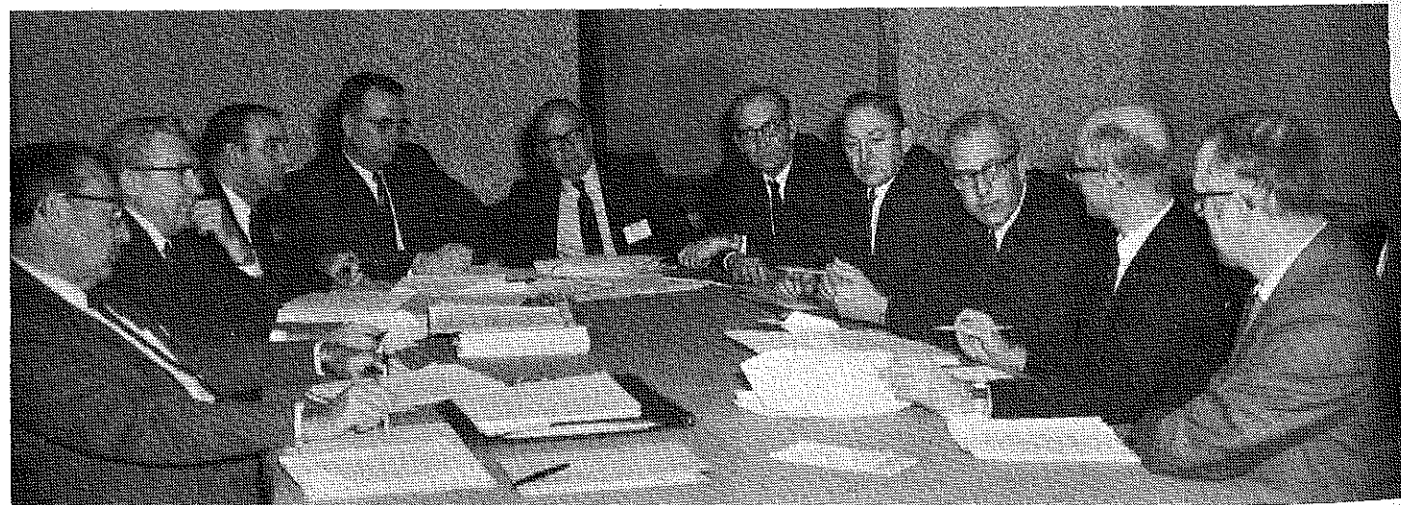
The annual meetings of the American Association of Teacher Educators in Agriculture were held during the AYA Convention in Boston, December 1969. Charles C. Drawbaugh (right) of Rutgers University, AATEA President for 1970, performs under the watchful eye of Paul Revere. (Photo by Robert W. Walker)



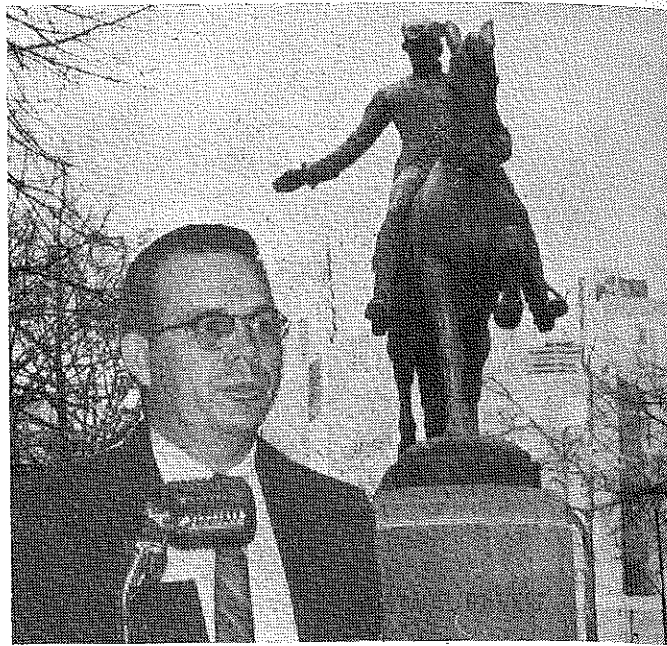
W. Howard Martin, Professor of Education at the University of Connecticut, presents the AATEA Lecture on "Agricultural Education: Image and Substance." (Photo by Robert W. Walker)



George F. Ekstrom (right), Emeritus Professor of Agricultural Education at the University of Missouri, is presented the 1969 AATEA Distinguished Service Award by George L. O'Kelley, Jr., Vice President for the Southern Region. (Photo by Robert W. Walker)



AATEA EXECUTIVE COMMITTEE: (Left to right) George L. O'Kelley, Jr., University of Georgia, Southern Region Vice President; Richard H. Wilson, The Ohio State University, Central Region Vice President; W. H. Annis, University of New Hampshire, Secretary; Charles C. Drawbaugh, Rutgers University, 1970 President; Orville E. Thompson, University of California at Davis, 1969 President; William E. Drake, Cornell University, Atlantic Region Vice President; George L. Luster, University of Kentucky, Treasurer; Irving C. Cross, Colorado State University, Pacific Region Vice President; Alfred H. Krebs, Virginia Polytechnic Institute, Past President; and Gerald R. Fuller, University of Vermont, Atlantic Region Alternate Vice President. (Photo by Robert W. Walker)



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Agricultural Education



Featuring —

INSTRUCTIONAL PROGRAMS IN AGRICULTURAL PRODUCTION

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Guest Editorial . . .

Instructional Programs in Agricultural Production



C. E. Bundy

A wide variation exists in the emphasis given production agriculture in the instructional programs offered by vocational agriculture departments in the nation. In some communities, very little emphasis is given to production agriculture. In others, much of the instruction is still directed to meet the needs of those individuals who plan to farm or are currently engaged in farming.

Fortunately, we have not had prescribed courses of study in most states. Neither have we tended to base instructional programs around specific textbooks. It has been the responsibility of the local teacher to determine the needs of the individuals enrolled in the secondary and post-secondary classes and develop an in-

C. E. Bundy is Professor and Chairman, Department of Agricultural Education, Iowa State University, Ames.

structional program to meet those needs. A large number of the students now enrolled in vocational classes may not remain in the immediate community or remain in agricultural occupations. Instructors must anticipate the future needs of those individuals as well as their present needs. The instructional program, however, must begin with their present needs.

Production farming is big business in the United States and will continue to be a very important segment of our national economy. The 1969 production of the farms of this nation amounted to nearly \$50 billion. The products sold or used for home consumption on the farms and ranches of California amounted to more than \$4 billion. Production agriculture is a \$3.7 billion business in Iowa and a \$3.0 billion business in Texas. As a matter of fact, more than one billion dollars of farm products are produced in each of 21 states and an additional 12 states each produce more than a half-billion dollars of products each year. These data indicate that production agriculture must be given an important place in instructional programs.

(Continued on next page)

Guest Editorial . . .

How Realistic Are Beef Judging Contests?



Donald B. Locke

"Whenever any point on livestock ceases to be of practical value, it ceases to have a major place in livestock production." This statement, found in the *Livestock Judging Handbook*, bears reading and re-reading by many in our profession who help organize or are connected in any way with beef cattle judging contests.

For some years now we have paid lip service to the new look in beef type; but for some strange reason, we continue to see fat, wasty beef animals dominate shows and fairs. This, in too many cases, is the reason many vocational agriculture judging teams lose out or make low scores in contests. This, in turn, leads to discouragement and confusion by vocational agriculture students as to correct beef type.

If a progressive teacher prepares a judging team to think

Donald B. Locke is Teacher of Agriculture, Butler County High School, Morgantown, Kentucky.

modern concerning beef type and then enters contests set up according to old standards (which too often is the case), his team turns in a poor score and any possibility of a learning experience is lost in the confusion. The teacher has taught students one thing to look for concerning type, but the official judges are teaching another. For example, in a recent live beef and carcass show in Louisville, Kentucky, the animal that placed first on foot had the last place carcass!

One has but to talk to a few commercial beef operators to find out the true story. Recently, in answer to the question as to what type of feeder calf he looked for, a well known operator in my area replied, "Give me an animal with a lot of size, stretch, and muscling; these make me the most money."

After all the housewife or the consumer, not a panel of beef experts, really determines type. She will not pay for wasteful fat which the swine industry got rid of fifteen years ago.

As a vocational agriculture teacher, I plan to continue to prepare beef judging teams to think modern and hope

(Continued on next page)

Instruction in Agricultural Production

(Continued from page 243)

The number of farms in Iowa and in the nation decreased 3 percent during 1969. The average size of farm in the nation in 1955 was 258 acres. In 1970, the average size of farm was 387 acres. It is anticipated that the trend toward larger farms will continue. As farms increase in size, the capital invested per farm in land and buildings, machinery and equipment, and livestock inventories is projected to increase by more than 90 percent between 1965 and 1980. The great increase in capital needs has implications for future programs in production agriculture. Much more attention must be given to the obtaining and efficient management of capital.

While the larger farms of the future will involve the use of large equipment permitting each man to cultivate larger acreages, there will be a tendency for the farms to be multiple-man businesses. Large livestock operations will necessitate the employment of two or more workers. The operators of these farms must be scholarly in the use of management techniques, finance, and be able to analyze carefully farm business records. Farm operators and managers must be sufficiently knowledgeable of the basic sciences to understand the developments in technology related to the use of agricultural chemicals, fertilizers, and feed additives in livestock production. They must understand the principles of breeding to be able to cope with the changes coming about in varieties of crops and in livestock breeding.

While we will witness decreased numbers of persons employed in production agriculture in our state, the total number of persons employed will continue to be large compared to the number employed in other occupations.

Some knowledge of production agriculture is needed by persons preparing for employment or currently employed in off-farm agricultural occupations. Persons engaged in the retail distribution of feed, seed, fertilizer, chemicals, and other farm supplies must be knowledgeable concerning the problems related to the production of farm commodities. Even though in some communities there are more persons employed in off-farm agriculture than in production agriculture, there is still need for some instruction in production agriculture. In most communities, the instructional programs must prepare individuals for proficiency in both production and off-farm agriculture.

It is probable that some teachers are devoting entirely too much time to production agriculture and not enough time to those competencies needed by persons who will be employed in non-farm agricultural occupations. Other teachers may be devoting entirely too little time to production agriculture, and as a result, students are entering off-farm agricultural occupations without certain competencies that are needed for successful employment. Teachers, both at the secondary and post-secondary levels, must carefully analyze the probable needs of students and plan a program of instruction which will meet those needs.

Instructional programs in production agriculture are not a thing of the past. For those who will be engaged in production agriculture in the years ahead, instruction in production agriculture is now more important than at any

previous time in the history of American agriculture. The farm operator and farm worker of the future must possess greater competence in agricultural technology and management finesse than possessed by any former group of farmers.

How Realistic Are Beef Judging Contests?

(Continued from page 243)

the "powers that be" will also see that there is a drastic need for change. What really is our purpose? Is it to prepare students, in the case of beef judging teams, to place the animals according to the official placings; or is it to prepare students to select animals that will yield the most dollars now or in the future when they are engaged in beef cattle raising as owner-operators or as farm managers? I choose the latter reason.

Let's put our new thoughts concerning beef type into action and in so doing not give our students a "bum steer."

Themes for Future Issues

May	General and Practical Arts Education in Agriculture
June	Evaluation in Agricultural Education
July	Agricultural Education in Post-Secondary Schools
August	Adult Education in Agriculture
September	FFA: Past — Present — Future
October	Ideas for Effective Teaching
November	Research in Agricultural Education
December	Innovations in Agricultural Education

THE COVER PICTURE

Steve Greiner (left) and Ed Elmore, vocational agriculture students in Fairfield, Iowa, check the records of sixteen corn plots on the 16-acre farm rented from the County Fair Board. Keith Wells, Vocational Agriculture Teacher at Fairfield High School, supervises 84 vocational agriculture students in the school who participate in the land laboratory activities. The plots are also used for young and adult farmer instruction. (Photo by Gerald F. Barton, Consultant, Iowa Department of Public Instruction)

Education for Farmers in the Seventies

PHILLIP ALAMPI
Secretary of Agriculture
State of New Jersey

Problems and Pressures

Instructors must recognize the need for self-improvement and further study in order to be able to maintain higher standards in both methods and subject matter. Fortunately, such efforts are being recognized now with improved salary schedules in many school districts.

The vocational agriculture instructor must recognize that there are many new factors involved in the success of a farm enterprise today. I would like to stress the importance of what might be called the "off-farm" factors and pressures which have become as important as the "on-farm" practices. I have in mind such problems as taxes, credit, zoning, planning, labor, schools, federal farm programs, health codes, water, soil conservation, and the encroachment of industry, highways, airports, shopping centers, and housing developments on our open space.

Most of these problems and pressures were unknown or of little concern to past generations of farmers. There are a few guideposts to follow as we consider these pressures and the first reaction of many farmers to resist them. I urge that vocational agriculture instructors assume at least some of the responsibility for making these problems better understood by both high school students and adults.



Phillip Alampi

This article is from Dr. Alampi's address to the National Association of Supervisors of Agricultural Education, Boston, Massachusetts, December 1969. Dr. Phillip Alampi, a former vocational agriculture student, FFA member, and teacher of vocational agriculture in New Jersey, has been New Jersey's Secretary of Agriculture since 1956. He holds the bachelor of science degree in agriculture and a master of education degree from Rutgers University. In 1969 he received an honorary doctor of laws degree from Rutgers University. Dr. Alampi is past president of thirty-two organizations and has received over thirty-eight awards. In 1965 he received the Outstanding Citizen of New Jersey Award.

Let's look at the farmer of the 1970's. I must confess that he is vastly different from the image we had in my early years as a vocational agricultural instructor. We pictured an able, intelligent, skillful husbandman of the soil whose primary goal was production. Today we find him wearing many hats. To succeed he must be not only the able husbandman, but also an efficient buyer, seller, taxpayer, consumer, technologist, manager, all-round worker, businessman and citizen. For the former goal of teaching "how to do it," there has been substituted the greater challenge of "what to do with it."

Today vocational agriculture instructors are dealing with sophisticated ideas and sophisticated young persons. If they think they are dealing with a "bunch of kids," either they are wrong or the bright young people are wrong for enrolling in their courses. I have the utmost respect for the young people of today.

Some Observations

Although we are all very much concerned about the educational programs in agriculture, there remains the need for a good grounding in the basic sciences as well as in mathematics, English, and other general subjects. These subjects should be retained, but perhaps upgraded. The present population shift to rural areas already is raising the standards of many schools which formerly suffered by comparison to those in urban areas. Farm leaders and organizations must assume more of the responsibility for these improvements in order to provide equal opportunities for rural students.

All curricula should be reviewed and appraised with a view to upgrading all courses. This means further revision in many schools where the "how to do it" approach of past years continues to survive.

(Continued from page 245)

organization, and operation of farm associations and cooperatives, the responsibilities of leadership and membership, and their services to the community as well as to their members are not well understood nor appreciated by many farmers.

These are typical examples of subjects and situations which are worthy of consideration if the vocational agriculture instructor is to fulfill his role in the classroom, on the farm, and in the community. Of course, there are limitations to what he can undertake and accomplish. Those possessing the same qualities of leadership which they seek to inspire in students will find it worthwhile to enlist the aid of others, thus multiplying their own efforts.

Individuals or committees, consisting of competent and experienced men, can be enlisted to meet with classes and other groups. Both high school students and adults respond readily to those who can speak in first person about their own experiences. There is no better source for expert guidance and counsel. They can contribute much that cannot be found in a textbook or manual.

I believe that advisory groups should also be used to assist guidance coun-

selors in consultations with students concerning college education. Those considering agriculture or agribusiness as a career should be encouraged to fit themselves for entrance to a college of good standing. I believe they should plan not only to enroll in courses devoted to basic sciences and technology but also broaden their education with at least a few courses in social science, political science and business administration. Each year a knowledge of these subjects becomes more and more essential to success in present-day agriculture.

A few years ago I urged recognition of the fact that training in public speaking and writing is also desirable. That was certainly true then, just as it is now. I base my comments on the assumption that instructors and students must know English as a basis of communication.

Vocational studies in high school do not preclude intelligence, college studies, or success in the business of business, the business of the arts, the business of scholasticism, the business of government, the business of theology, or the business of anything else you can think of.

A knowledge of the role of govern-

ment has become essential in most professions and businesses including those related to agriculture. The functions and scope of government regulations, responsibility to government, the matters concerning income and property taxes affect every farm and agribusiness enterprise. These cannot be overlooked when preparing for a career in agriculture.

The Challenge

I deeply believe that the scope of agricultural education must be further broadened to include a better knowledge of the on-farm essentials and also reach out into the realm of the many important off-farm factors that confront modern farmers. Our schools and colleges must keep pace with the rapid changes occurring in the rural economy and in the entire economy.

Students deserve the best education available under the direction of well qualified instructors who, in turn, are willing to prepare themselves even better through advanced study and self-improvement. To accomplish these objectives, we must raise our sights. More than ever, this is the age of education. Those with better trained minds will forge ahead. We must not short-change our farm boys and girls. I am confident that instructors of vocational agriculture and those who supervise them will meet this challenge.

of the principles of agricultural marketing as well as more detailed information regarding the marketing of specific agricultural products. Teachers of vocational agriculture will find the publication a valuable source of basic information and high school pupils will find it excellent for reference use.

Particular emphasis is placed on demand and supply of agricultural commodities and how the marketing system unites and coordinates these phenomena. An up-to-date treatment is accorded the various roles and functions that market prices play in the marketing system. A practical approach is taken in presenting overall marketing costs of agricultural commodities with recommended ways of reducing these costs. Those interested in pursuing special commodity marketing problems

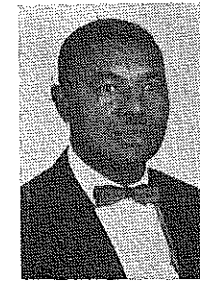
in the livestock, dairy, grain, cotton, or fruit and vegetable areas will find a detailed and rich treatment in the latter part of the book. In total, the subject matter is presented in a concise and readable form. The authors make abundant use of figures and tables for illustration purposes.

The book is organized in three separate sections: an analytical approach to marketing; a discussion of overall marketing problems; and marketing analysis of specific commodities. The authors state they have completely rewritten several of the chapters, many of the sections, and all of the tables and charts for which more recent data could be found. The basic pattern of the book remains as in earlier editions.

Marvin D. Thompson
Wisconsin State University

The Role of Supervisors

ALFRED STEWART, Supervision
Louisiana Department of Education



Alfred Stewart

Alfred Stewart is Vocational Agriculture Supervisor and Subject Matter Specialist, State Department of Education, Baton Rouge, Louisiana.

Supervision is the systematic and continuous effort to encourage, assist, and direct teachers such that they become increasingly more effective in contributing to the achievement of students for whom they are responsible. Supervisors give consideration to the attainment of students and to the growth, effectiveness, and welfare of teachers. Teachers' strengths, weaknesses, and attitudes must be understood and considered if supervisors are to operate effectively.

Supervision must also be concerned with day-to-day activities involving practical educational matters and difficulties so that educational plans can become reality. Supervisors should strive through encouragement and assistance to see that teachers understand and accept worthwhile objectives and that they select and use effective means of attaining objectives.

Some activities which local and state supervisors should perform are discussed in this article. Some of these activities can best be accomplished in group meetings; others are more effectively achieved through face-to-face contact with teachers. Some supervisory activities can be classified as assistance to teachers while others are considered as promotional and cooperation with other educational personnel.

Assisting Teachers

A major role of local and state supervisors is assisting teachers in deciding on and adopting educational goals. Questions such as the following should be raised: What is meant by vocational education? What should be accomplished through instruction in vocational agriculture? What are the needs of students enrolled? How can these needs best be met?

Supervisors must also assist teachers in providing educational experiences for students and in improving the teaching-learning process. The beginning place here is a complete understanding of the principles of effective teaching. It includes assisting teachers with such activities as lesson planning, FFA activities, guidance functions including orientation, placement, and follow-up of students, evaluation, student work experiences, classes for adults and special students, and team teaching.

To be effective, supervisors must know something of teachers' interests, activities, and leisure time activities. Not only must the supervisors know the intellectual abilities of teachers, but he must also be aware of the teacher's attitudes toward teaching, toward fellow teachers, toward supervision, toward professional growth, and toward success and failure.

Promotional Work

Without promotional work a program can dwindle to nothingness or a kind of insignificance which renders it ineffective. One of the functions of a supervisor is to promote programs of vocational agriculture. This he does by keeping informed on the needs for new departments and new teachers and for multiple-teacher departments. Supervisors should encourage and assist in recruiting and training teachers. They must be aware of existing as well as projected needs.

So the supervisor serves as a member of the recruiting and placement team for students completing educational programs. This includes individuals leaving high school who are ready for work, those desiring to go on to

college and need assistance in choosing an institution, and those completing programs of professional teacher education who seek placement as teachers of vocational agriculture.

Cooperating with Others

An effective supervisory program must involve communication with other agencies and personnel. Channels of communication need to be established with deans of colleges of agriculture, teacher educators, livestock show managers, livestock specialists, experiment station personnel, and commercial agencies. All of these provide supervisory assistance in planning in-service education, work experience, project development and operation, career information, recruitment, and placement services.

It should be emphasized that the major function of a state supervisor of vocational agriculture and the staff is to assist teachers to grow professionally. Relationships among state supervisors, vocational agriculture teachers, and local supervisors should be that of close professionalism.

The state supervisor should arrange to give counsel as needed to the teacher and to the principal and superintendent concerning finance and administrative matters. He must do this with some degree of diplomacy so as to make it evident that the ultimate responsibility resides in the local school and that he is interested in assisting where necessary, desirable, and possible.

Teachers of agriculture must be reminded that the real responsibility for administering and supervising all educational programs rests upon their shoulders. They should, however, be encouraged to seek assistance from supervisors when it is needed and desired.

BOOK REVIEW

MARKETING FARM PRODUCTS
by Geoffrey S. Sheperd and Gene A. Futrell. Ames, Iowa: Iowa State University Press (Fifth Edition), 1969, 510 pp. \$9.50.

Earlier editions of this publication have been used extensively by students and others in agricultural marketing. This revised edition is updated with a pertinent and relevant treatment of the appropriate organization and functioning of the marketing system. Designed primarily as a text for students at the university level, it provides coverage

Education for Young Farmers

WILBUR RAWSON, Supervision
Kansas State Board for Vocational Education



Wilbur Rawson

A complete program of vocational education in agriculture must provide instruction on decision making for the operating farmer. The young farmer in particular is faced with management decisions that involve the "whether" science of agriculture. Errors in judgment in farming today are more catastrophic than a generation ago.

The farmer's changing role from operator to manager of a complex business demands greater skill and more knowledge to make decisions. Farmers depend on more people to assist them in running the farm, and in turn more people depend on the farmer for their livelihood.

Today's advances in agriculture through research require a continual review of farming methods, farming techniques, and even the laws connected with agriculture. Some of the things that have helped change the picture of agricultural education for farmers in the past generation are noted in the accompanying chart.

• Sources of Information

Where do farmers learn about new and more efficient ways of doing things? In a recent survey of 378 young farmers in Kansas, over 70 per cent replied that they used two sources: one was the advice of successful farmers; the other was commercial companies producing products and equipment used by farmers.

The survey also turned up some interesting comments concerning problems young farmers encountered in their quest for knowledge and how they

found answers to these problems. Many young farmers travel hundreds of miles to observe livestock production systems and grain handling equipment. Suppliers and manufacturers of farm equipment finance trips for interested young farmers to view equipment which they sell.

There are fewer opportunities today for farmers to exchange ideas with fellow farmers. The country schools, churches, Saturday nights in town, and other places where farmers gathered in the past have been erased from many

rural communities. Young farmer courses provide an opportunity for the exchange of ideas among farmers with common problems.

One young farmer living in an irrigated area reported that a group of young farmers met at a cafe early each morning to discuss problems connected with irrigation. Records were jotted down about the different practices being followed and a type of research resulted. The competition of crop yields added to the interest. The common problems of these men and their desire

The Changing Nature of Farming

TWENTY-FIVE YEARS AGO

Dad was the primary source of information for the young farmer.

You could farm if you couldn't do anything else.

The farmer could guess at what to do.

The farmer did his own research.

Advice on agriculture was good for five years.

Long hours of hard work were necessary for success in farming.

The public was sympathetic with the farmer and his problems.

TODAY

Many questions about today's farming operation cannot be answered by yesterday's farmer.

The opposite is more nearly true. Few non-farm people realize the amount of knowledge required to make the decisions required on a modern farm.

Farmers who "guess" today will not be farming long. The "whether" decisions in agriculture must be based on facts.

Others must be depended upon to assist in researching most problems. Some research can be carried out logically by a farmer.

Practices used for three years should be examined closely. Those used five years are probably obsolete.

When to work, what to do, and why it's done determine success in farming not how long the farmer works.

The public cares little about the farm price squeeze as long as food is cheap. This reflects the need for leadership and education among farmers to solve his problem.

to learn from one another created a type of education wanted and needed by farmers. The successful young farmer course must include all sources of information necessary to supply farmers with the latest facts on agriculture.

• State Organization

Kansas has developed a State Young Farmer and Young Farm Wives Association. Each local chapter elects officers, has a constitution, and receives a charter from the State Association. Dues are \$1 per member. Each member receives the state newsletter six times each year.

Members under thirty-five years old are allowed to compete in an extensive awards program financed by commercial firms. A convention is held each year, and two delegates from each chapter act on business of the State Association. The wives' organization has no dues, but receives a part of the dues collected from the young farmers' organization. The State Association conducts a two-day tour sponsored by local chapters. Young farmers and wives visit members' farming operations. The State Association requests that the tour not include the biggest and best farms of the community but rather farming operations of young farmers.

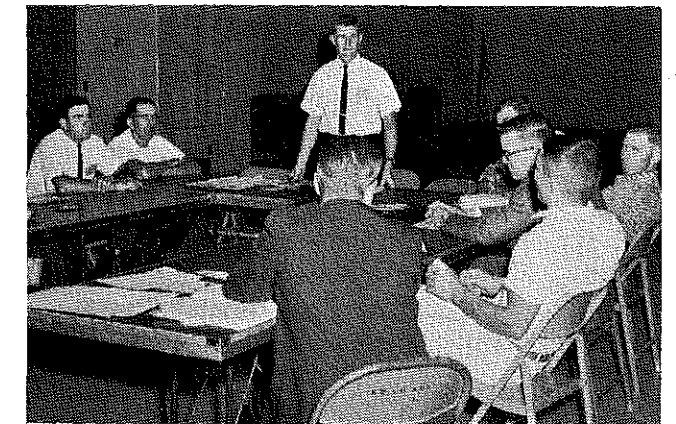
• Young Farmer Programs

Those who organize and operate young farmer courses must recognize the following rules.

—Young farmers accept information or facts from those who speak with authority about agricultural subjects. Young farmers do not question the facts given on swine production from a successful producer or someone who has actually done research with swine. Few classes will accept the bulletin or book approach to young farmer education.

—Young farmers must have a part in planning the educational program. The time has passed when the vocational agriculture teacher should point a finger at a young farmer and say, "Come to school — I want to teach you something about farming." Farmers know what they want to know. They are just looking for a place to find answers or facts on which to base their decisions. Given the facts, any

Young farmers must have a part in planning the educational program.



farmer is smart enough to make decisions.

—Young farmers must become involved in the actual operation of the course. They must develop their own leadership through serving as officers or as committee members. Many class members will be college graduates — most of them former vocational agriculture students. Latent leadership must be developed. The young farmer must be made to feel important. The course should be theirs, and the success or failure of the course must also be theirs. The vocational agriculture teacher's part is organization and leadership of the course. The group should become a part of a state organization for young farmers.

—The total educational program for young farmers must include the wife and family. The course must meet a social need for the farm family. A young farmer program that overlooks the

need for including the wife cannot meet the needs of the young farmer. The recreation aspect of the young farmer program is important. The fact that farmers learn early in life how to work many times means he needs to learn how to relax and enjoy living.

• Key to Success

Schools in rural communities are in a favorable position to include an educational program for young farmers of the community. It is doubtful that a community not offering young farmer education can justify a vocational agriculture program in its high school. A properly planned and organized young farmer program will be an asset to the school and a benefit to the community. Yet, the key to the success of a young farmer program remains with the vocational agriculture teacher.



The young farmer program must include appropriate instruction and activities for wives.

FARM BUSINESS MANAGEMENT INSTRUCTION FOR ADULTS

PARKER A. WOODUL
Specialist in Farm Management
Portales, New Mexico

Based upon their 1968 farm records, the Wayne Bakers made four changes in their 1969 farming program. Keeping accurate records and studying the analysis of their records along with the records of other farmers, they leased 20 additional acres for peanuts, their top economy crop, and moved 84 acres of peanuts from disease infested and water-short land; substituted a mid-season grain sorghum for a full-season grain sorghum to reduce the cost of production; cut the cost of fertilizer on cotton; and planted only 65 per cent of their allotted cotton acreage.

Decisions to make changes in a farming program must be based on *complete* and *accurate* records of each livestock and crop enterprise as well as records for the entire farm. The Bakers realize that making a farm program change based on one year's record is a dangerous thing. However in comparing their analysis with the analyses of 38 other farms, it was felt that sufficient evidence did indicate some changes should be made.

Keeping Records

Wayne and Joanna Baker started keeping farming records as newly married beginning farmers seven years ago. "I started keeping records for tax purposes but now see the real need for enterprise records," Wayne recalls. Records kept by the Bakers before enrolling in a Farm Business Management course were primarily an accounting of total farm expenses and income. No pretense was made to look at a single enterprise as a basis for economic decisions. They found that fixed expenses as well as inventory changes must be added to operating expenses if a true economic picture of an enterprise is to be obtained.

Supervised farm record keeping provided an opportunity to acquire a new

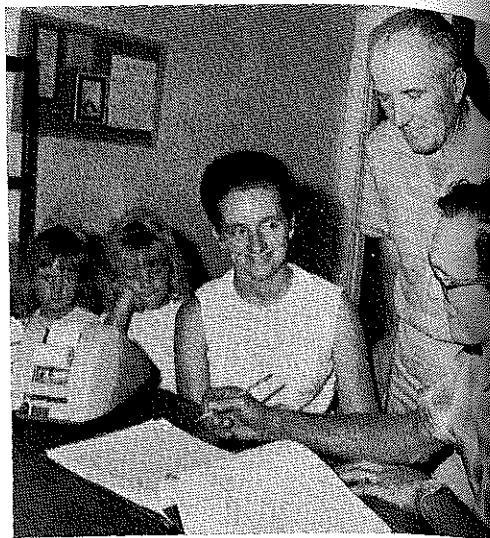
family skill. To make the best use of this new tool, the Bakers enrolled in a Farm Business Management course which was a pilot program started on a county basis in the fall of 1967. Four school-community management groups were organized in 1968 with a total of 38 members. One additional group was formed in the fall of 1968 bringing the total enrollees to 45 farm and ranch families for 1969. Like the Bakers, each of these families has come to the conclusion that, if economic progress is to be made in farming, complete and accurate records must be kept.

Joanna Baker says, "My family living records at the end of the year were quite revealing. Now I know where the money goes." Her husband frankly admits that for several years he did not include family living as a part of farm operations but has found that this item is a must if a realistic budget is to be made.

Supervision

Generally entries are made in the record book immediately following receipt of the bank statement each month. Monthly entries require an hour of uninterrupted team work of the husband and wife, but about two weeks are required to close the books, make tax reports, and complete enterprise analyses at the end of the year.

The Bakers insist that instruction and supervision are necessary to insure good farm records. Perhaps fewer instructional visits are needed for the more experienced, but continuous help is needed to keep up with agricultural technology, changes in government programs, and tax requirements. Progress has been made in the essentials of good record keeping. A high percentage of the families have purchased adding machines, filing cabinets, desks, set up filing systems, and set aside a part of the house for an office.



The Wayne Baker family review their farm records with Parker A. Woodul (standing), Specialist in Farm Management for Adults, Portales Municipal Schools, Portales, New Mexico.

Families are working more closely with their tax accountants. Many are completing their own tax reports. The families enrolled in the farm business management program are becoming more knowledgeable in the use of capital gains, depreciation, inventories, investment credit, operating expenses, capital investments, and net worth statements.

Continuing Education

Record keeping was a natural for the Bakers. Joanna was a former 4-H member and home economics student; Wayne was an active vocational agriculture student in high school. They agree that instruction in public school was good but they were too immature to take full advantage of the instruction given.

Both feel that the schools have a responsibility for continuing education of adults. Wayne puts it this way: "I think as far as education is concerned, a dollar spent on me now will go a lot further than when I was in high school. I am ready now." If this problem exists for the Bakers, it probably exists for many other young farm families.

What have the Bakers learned from their work and study on records? They have learned that family living is a part of the total operation; that to achieve family goals, net worth must show progress; that accurate records are needed for tax purposes; and that they have at their finger tips valuable information for decision making.

Specialized Courses for Adult Farmers

M. L. CHAPMAN, Area Adult Teacher
Tifton, Georgia



M. L. Chapman

The Area Teacher Program in Georgia, an effort of the Division of Vocational Education in Agriculture of the Georgia Department of Education, is designed to help as many farmers as possible with specialized instruction. The program was begun in 1955 with ten teachers selected from the vocational agriculture teachers of Georgia. These teachers were given intensive technical, specialized, and practical preparation under the direction of the teacher education staff of the University of Georgia.

Area teachers provide technical instruction for organized groups of farmers in local communities and assist regular teachers of agriculture with adult farmer instruction. This broadens the scope of vocational agriculture instruction in local schools.

Specialized Instruction

The program proved so successful that now it has been expanded to 20 teachers working in Agriculture Power Mechanics and Farm Management (14 teachers), Livestock Production and Management (4 teachers), and Forestry Production and Management (2 teachers). A partial list of the problem areas that area teachers deal with are small gasoline engines; planning and construction of pole-type farm structures; farm tractor operation, maintenance, and repair; chain saw operation and maintenance; farm electrification; farm welding; farm water systems; electric motors and controls; farm fencing; farm management; organization and tax reporting; forestry production and management; beef cattle production and management; and swine production and management.

The courses provide instruction for adult and young farmers both in the classroom and laboratory. The classes usually meet from three to five times with six to fourteen hours of instructional time divided between classroom instruction and practical work experience.

Area teachers are located in each of the administrative areas in Georgia. They devote approximately 65 per cent of their time to preparing for and teaching groups of farmers who are organized by local agriculture teachers. About 20 per cent of their time is given to providing in-service education for regular and young farmer-adult farmer teachers of vocational agriculture. The remainder of their time is devoted to special problem areas in connection with the total program of vocational education in agriculture.

During 1968-69, the 20 area teachers working with local teachers of vocational agriculture taught 378 courses with 5,636 farmers enrolled. Some of

the more popular courses were farm electrification (49 courses), small gasoline engines (56 courses), operation and maintenance of chain saws (32 courses), selecting and breeding beef cattle (27 courses), and farm income tax and social security (61 courses).

Contributions

Local teachers of vocational agriculture request the assistance of area teachers when planning local programs of work by listing the courses in which they would like to have help. The area teacher follows up after checking the programs of work and develops schedules with teachers with whom he will be working.

The area teacher is able to give expert technical instruction in areas where the regular teacher of agriculture is not a specialist. The area teacher program in Georgia has made a significant contribution to both the quality and quantity of young and adult farmer instruction.

BOOK REVIEW

THE SCIENCE OF ANIMALS THAT SERVE MANKIND by John R. Campbell and John F. Lasley. New York, New York: McGraw-Hill, 1969, 771 pp. \$12.50.

Finally there is a reference available that introduces students to the way biological science is applied to the production of farm animals. Subject matter is presented from the principles of biological science and omits production and management practices. Content focuses upon animal nutrition, genetics, anatomy, physiology and diseases.

The material is well indexed and many illustrations are used. Examples are used to clarify principles presented. Subject matter is cross referenced to guide students to appropriate sections of the book. Each chapter contains a summary and list of study questions. Answers are given for those questions requiring mathematical calculations. A detailed glossary is contained in the Appendix.

This book would be an excellent addition to all high school and junior college agricultural education libraries. Biology teachers in schools having large numbers of rural students should be aware of this introductory reference book, also.

Gerald R. Fuller
University of Vermont

MODERN ADULT EDUCATION IN AGRICULTURAL PRODUCTION

GLENN Z. STEVENS, Teacher Education
The Pennsylvania State University
and
RICHARD L. HUMMEL, Supervision
Ohio Department of Education

"Young farmers are on the move!" This was the way a past state president began a letter written with enthusiasm upon returning to his eastern beef and tobacco farm from attendance at the Texas and Nebraska state Young Farmer Association conventions. At the third National Young Farmer Educational Institute at Host Farm Resort Motel, Lancaster, Pennsylvania, last December, many who were there made arrangements to attend other state YFA conventions in 1970. Education, service, and leadership are key words that describe the purposes of the Institute. The state associations and local units in high schools where vocational agriculture is offered have the same goals.

Growth

Eleven young farmers from eight states attended the 1967 Institute at Cleveland, Ohio. Fifty-four young farmers from twelve states were in Dallas, Texas, at the 1968 Institute. One hundred and thirty young farmers from eighteen states attended the 1969 Institute at Lancaster, Pennsylvania. Total attendance at Cleveland was 35; at Dallas 140; and at Lancaster 320.

The American Vocational Associa-

tion provided meeting rooms in Cleveland and Dallas. Seven agricultural industries provided funds for expenses of the Texas arrangements committee and twenty six companies contributed to the costs of the 1969 Institute. An increasing number sent representatives, furnished speakers and consultants, and set up educational displays.

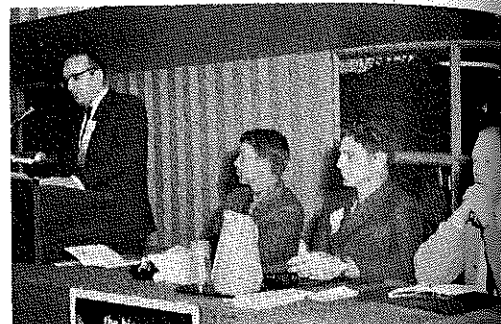
The Institute provides for exchange of information among states. Young farmers proudly contribute to the program by showing color slides, exhibiting copies of their publications, and describing educational, community service, leadership, and recreational activities.

State Associations

Before the Institutes were initiated, there were state associations in California, Hawaii, Indiana, Kansas, Kentucky, Nebraska, Ohio, Pennsylvania, South Carolina, Texas, Utah, and Virginia. In 1969 Oklahoma, Missouri, New York, and Colorado held meetings leading to state organizations. Young farmers from Georgia, Vermont, and West Virginia attended the Executive Committee sessions at Lancaster and named delegates to the 1970 committee.



Eighty ladies, including 67 young farmers' wives participated in special programs at the 1969 Institute. (Photo by Billy Conner)



Max Heilman (standing), Ohio, sets the stage for a discussion period during the Institute program. Discussion leaders (seated left to right) are Don Quattlebaum, South Carolina; Ray Driver, Virginia; and Fred Pearson, Kansas. (Photo by Billy Conner)

The autonomy of the young farmer associations is in the states. This may be exemplified by the fact that each of the twelve long-established associations has its own distinctive emblem. The state constitutions and by-laws, along with the charters of the states where incorporated, say clearly that YFA is entirely educational in nature and purpose, associated with local and area school districts that teach vocational agriculture, and that all activities are for the occupational and personal development of members engaged in agricultural production and in industries and services that provide food for people.

National Institute

If you have attended a state young farmer convention in the winter and a state young farmer tour in the summer, you know what the National Young Farmer Educational Institute is like. Members and their wives, along with instructors, supervisors, agriculture industry and agency representatives, and guests assemble at a modern motor inn or hotel for two, three or four days of a varied program including talks, dis-

The Atlantic Dairy Association provided a free milk break booth at the Institute. (Photo by Billy Conner)



cussions, and social and recreational activities.

The National Institute tours are strictly limited to visits to farms and ranches of young farmer members. This is similar to the summer tours sponsored by most state associations. Four large buses were used on two afternoons. Half of the group went each day to five young farmer's farms in the Garden Spot High School community at New Holland, Pennsylvania, and half to farms of four Penn-Manor High School young farmers at Millersville, Pennsylvania. Major enterprises observed were dairy cows, beef and swine feeding and breeding, laying hens, commercial vegetables, and tobacco.



Young farmers observe automatic egg-gathering equipment in a cage laying house during a tour to the farm of a young farmer who is a member of a family corporation. (Photo by Billy Conner)

BOOK REVIEW

APPLIED ANIMAL NUTRITION by E. W. Crampton and L. E. Harris. San Francisco, California: W. H. Freeman Company, Second Edition, 1969, 753 pp. \$12.00.

This book was designed to help bridge the gap between animal nutrition and livestock feeding practices. The subject matter is treated under four main sections. Section one deals with definitions and a consideration of terms and expressions used in describing feedstuffs. Section two deals with the nutritional requirements of animals with special attention to the biological bases for feeding standard data. Section three features the classification of feeds and ration formulation involving the translation of feeding standards into terms of meal mixtures, mineral mixtures, and mixed supplements.

Size of farm businesses of Lancaster County young farmers vary from 40 to 100 dairy cows, 200 to 400 steers, or ten to thirty thousand laying hens. Cropland usually includes 150 to 500 acres of field corn and alfalfa hay, with part of the land being rented.

Most of the questions young farmers ask are concerned with management and marketing. Mechanization and labor quality are of great importance. It is evident that young farmers and their wives are involved in community planning. Their homes are modern and they have plans for the education of their children.

The book features the use of a new system of nomenclature for products used in animal feeding mixtures. Information on the use of the caloric system of describing biological energy is provided. Quantitative data are given in both the metric and avoirdupois system. Approximately 290 pages of appendices are provided which include tables for metabolic size and numerical conversion, the chemical and biological composition of feedstuff, and tables related to feed composition.

Activists

Young farmers who participate in local classes in agricultural production, some of whom serve as state officers, are activists in very constructive ways. They are articulate, alert, efficient, and cooperative. Enduring friendships are established. Horizons become national, even international, as they invest several hours each month in continuing adult education in agriculture in their local high schools and a few days each year attending state and national educational meetings.

The 1970 Institute will be sponsored by the Kansas Young Farmer Association. South Carolina young farmers bid for and were named as hosts for 1971. The Pennsylvania arrangements committee has completed the important job of printing and distributing the proceedings of the 1969 Institute. Copies will be sent on request.

C. E. Bundy
Iowa State University



Gene L. Elliott

Realistic Instruction— Our Continuing Challenge

GENE L. ELLIOTT
Agriculture Occupations Instructor
Farmer City, Illinois

Agricultural education has the same goals today that it had twenty years ago — *meeting the needs of people*. Agriculture is constantly changing, but needs of people change too. This is our challenge—serving those that need us rather than limiting the program to a select group as many of us have done in the past.

Charges and Problems

I would like you to ponder the following charges and problems facing agricultural education.

—With the great shift from a rural to urban populace, there are fewer people farming the land and fewer young people returning to the farm. Therefore, the number of people directly involved or interested in production agriculture is less.

—Too many people still think that teaching agriculture means teaching

proficiency in farming and nothing more. Therefore, the need of an agriculture program is decreasing.

—Many larger schools have never offered agriculture or have dropped it because of a lack of interest or enrollment.

—Smaller schools have enrollment problems or scheduling conflicts with time required for more “academic” subjects, or the underlying feeling that “agriculture” isn’t as necessary as it used to be.

As a result of these situations, many vocational agriculture instructors or agriculture occupations instructors (even our title is confusing today) are frustrated about where they are going, what they are teaching or are supposed to be teaching, and even who is going to be left to be taught agriculture!

Responding to the Charges

Perhaps some of the following ideas will help us face these charges and come up with some positive points to aid agricultural education.

We know that most people moving to the large city do so because of economic opportunity. Never before have city dwellers been so concerned with living conditions. Although their jobs may be in the city, we see the mass migration to the suburb or to the country as people seek the “rural” atmosphere of a home of their own, a backyard, a garden, and a flower bed. These people need some of the skills we should be teaching.

Because of technical advances, production agriculture is as important as ever, but we need to include courses for those not directly associated with the farm. Most teachers of agriculture have done this to some degree. The important thing to remember is that

many of the skills and concepts we teach are just as important in the agriculturally related fields as they are in production agriculture.

Agricultural education should consist of programs that need to be adopted by the larger schools. There are things gained by students in the good vocational agriculture programs of the small schools which would also be valuable and appropriate for students in the larger urban and suburban schools. Air and water pollution, grounds and building maintenance, horticulture, home repairs, small animal care—you name it, all belong on a practical level in every school.

“Doing”

Today we have too many courses in which students learn simply for the sake of learning. An example is an English textbook that spends two pages discussing the mechanics of parliamentary procedure but never once insists that students stand and actually do parliamentary procedure!

Soil and water conservation, another example, is probably the most poorly taught unit throughout our school systems. Yet it is one of the major problems facing us today. John Q. Public is not concerned unless he is part of the minority connected directly with the soil or has some connection through outdoor recreation activities. Groups interested in outdoor recreation are growing by leaps and bounds and are quite concerned about conserving natural resources. What a program could be built around this area, both as a vocation or just for everyday living and fun! I don’t think we have enough “doing” activities in our schools today. Let’s keep our program a “doing” subject.

John Steinbeck said it best when he said, “Our purpose in life used to be planting or finding food to keep us alive, building shelter to keep from freezing, and defense against an enemy. This was our purpose for living. Now we have food, transportation, shelter, and the more terrible hazard of leisure.” I think we owe it to our children to teach more about leisure time and wholesome recreational activities along with job training.

Opportunities in Small Schools

We must recognize the opportunities that exist for the teacher of agriculture in the small school, and we must accept the challenge that we face. This is not the time to see decreasing enrollments and agriculture departments closing!

Perhaps we should look at ourselves and ask “why”? We still have a place; we must not sell ourselves and our programs short or let the educational process leave us by the wayside. We must try to keep the good that we have had in our programs and still add new areas to meet the challenges and changes required in an effective program today.

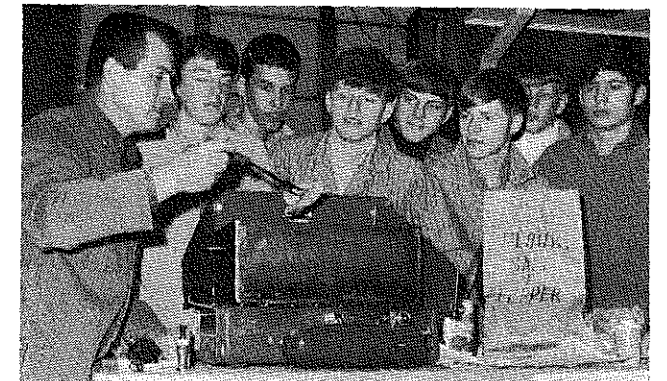
How do we do this? The answer is not simple nor easy. Here are a few guidelines: be ready to change; get out—see what others are doing and use their ideas; be an innovator—think up ideas of your own; and be enthusiastic! This is the catalyst that makes all the rest work.

We can do these easier than some teachers because of the history of teaching techniques in agriculture. “Learning by doing” has been the creed of our program since its inception and it is the heart of any good vocational program. Vocational agriculture students do things!

Teddy Roosevelt once said something to the effect that he would rather see a poor participator than an excellent spectator. Too many students in our schools today do not “do” anything. They just listen and read. I have nothing against listening and reading; but by themselves they make a poor vocational program. Plan activities that make students participators not just spectators.

A good production agriculture program has been essential in our rural

Learning to weld on a useful project is more meaningful than welding pieces of scrap metal together.



community. But we have had to make changes to include boys and girls not going back to the farm. More emphasis has been placed on students. H. M. Hamlin years ago commented in one of my graduate courses that “we spend too much time talking about pigs and not enough time talking about boys.” Maybe we are finally getting to the point of his comment!

Projects and Activities

I list a few of the projects and activities we have developed which are designed to interest students and help them develop vocational objectives, whether they are interested in production agriculture or one of the many agriculturally related areas.

—We converted a small test laboratory in the classroom into a plant growth and reproduction area by enclosing it with plastic and using artificial lights. Potting skills, simple cuttings, air-layerings, fertilizing, diseases and insects, and general plant care are the basic core of the horticulture course taught as a part of the freshman year.

—We developed an outside fire-place, picnic, and recreation area. It also includes six types of fruit trees, grapes, evergreens, and shrubbery for landscaping and identification work.

—We built a combination planter and marquee in front of the high school for school announcements. This involved design, concrete foundation, block and brick laying, and welding skills.

—We have the largest visual in school with moving parts! It is an actual size, cross-section of a ranch type house, complete with crawl space, ser-

vice entrance head, and light meter. It also shows paneling, types of siding, roof shingling skills, and methods involved in brick veneering.

—We follow-up meat identification and judging instruction with each student cooking meat and preparing an outdoor meal over charcoal just as the man of the family is expected to do in later years.

—In our area, camping, fishing, and boating have increased in popularity. This interest is used in the basic arc welding unit. We make a camping deep-fat fryer from mild steel plate that the students use on camping trips. A Coleman camp stove is set up in the shop with a fryer on it and at the beginning of the period a demonstration is given on how to prepare chicken for frying. During the period the boys go on with their welding skills. We quit ten minutes early so we can eat the lesson!

—We have a unit on salesmanship in which each student must research a product, then make a pitch to the class. This involves having the product there and dressing as if actually selling. This unit seems to challenge more students than the public speaking or parliamentary procedure unit. Selling seems to be the name of the game today. Education is selling. Everyone is selling. Why not teach it?

Perhaps you can try some of these ideas. Try something, use anything that works! Be realistic; be imaginative. You will be learning; students will be learning both skills and knowledge that can be used occupationally or to live better and enjoy life as adults in any occupation. Is there a better purpose for teachers of agriculture?



This small laboratory allows room for plant identification and basic asexual reproduction skills.

DO YOU NEED A SCHOOL FARM?

H. QUENTIN DUFF
Teacher of Vocational Agriculture
Miami, Florida

In some states, school farms are relatively new; in other states, they were established over fifty years ago. Florida was one of the pioneer states in establishing school farms to be used by vocational agriculture for educational purposes. The number is still increasing. The size of these farms varies from a few acres to several hundred acres. Some school farms are owned while others are leased by chapters.

SUPERVISED EXPERIENCE

The educational value of supervised experience programs has long been established. Traditionally, all vocational agriculture students had a supervised farming program, but this is not the case today. Recent legislation greatly enlarged the scope of secondary school programs in vocational agriculture. Many new responsibilities, opportunities, and challenges have been added. The clientele to be served has been expanded to include students who can not have a traditional supervised experience program.



The Vocational Agriculture School in Miami and its school farm provide occupational experiences for students who have no facilities for supervised experience.

The vocational agriculture curriculum has been broadened to include all of agriculture—off-farm as well as on-farm. If a total supervised occupational experience program is to be developed, one might ask: Where does the school farm belong in the expanded program?

School farms or land laboratories provide the opportunity for "learning by doing" for many students who otherwise would not have the opportunity to do so. Through careful planning on the part of the teacher a rather broad occupational experience program to include many specific fields or areas can be developed. The school farm is also a natural for many useful field trips.

Most teachers of vocational agriculture have the professional competence and practical experience to operate a school farm, but these qualifications alone do not necessarily guarantee success. The operation of a school farm involves school administrators, teachers, parents, and the public. These people must become involved in the program. Their involvement will develop understanding of and support for the program.

QUESTIONS

Teachers of vocational agriculture in urban schools are faced with many problems in providing supervised agricultural experiences. A school farm may be the answer. The following seven questions will aid in determining the need for a school farm. If you can answer all the questions in the affirmative, you have taken the necessary precautions to assure success in the operation of a school farm.



H. Quentin Duff

H. Quentin Duff is Teacher of Vocational Agriculture, Miami Central Senior High School, Miami, Florida.

Have you developed a realistic plan?

Look before you leap! Some former teachers of vocational agriculture are now employed in other areas of education because they did not do their homework properly. These teachers started school farm operations with the promise of facilities and equipment to come later. There must be a master plan with a timetable for completion.

Only general guidelines for establishing school farms are available since many schools throughout the United States were established to meet the needs of a local school situation. Therefore, you must develop your own specific guidelines. The addition of a school farm to your program is a large undertaking. You must be absolutely sure that the school needs a school farm and you must know how a farm is operated before you can adequately discuss its educational values with school administrators. A visit to established school farms should be the starting point.

Have you and your school administrators discussed the purpose and value of a school farm operated by the vocational agriculture department?

To enhance the success of the school farm, it is essential that all involved school personnel discuss the value of a farm instructional program. The objectives of instruction and the guidelines for operation of the school farm must be identified and discussed before being adopted. This meeting is of utmost importance since you will be obtaining the services and support of specialists in the fields of finance, curriculum development, and guidance. The function of the school farm must be for "educational purposes only."

Will the local school board finance the basic facilities — land, buildings, and equipment?

Or will the vocational agriculture department or the FFA chapter have to rent crop or pasture land, borrow a tractor and equipment from a local farm equipment dealer, and beg 200 baby chicks from a local hatchery? The purpose of the school farm is no different than that of a chemistry, physics, or biology laboratory. It should be adequately equipped and kept up-to-date with modern equipment. The budget should include the purchase of new equipment and the replacement and repair of equipment.

Will the school board finance the operation of the school farm?

By this I mean who will do the maintenance, the secretarial work, and the harvesting and marketing beyond educational values? Time and labor factors will determine the successful operation of the school farm. Will the students do most of the work? If so, how much during class time? How much work will the vocational agriculture teacher be expected to do that

is unrelated to teaching? We must keep the basic objective before us—for educational purposes; therefore, maintenance personnel and custom hired labor must be in the plan for operational procedures of the school farm.

Will you be director of the vocational agricultural program?

This question has been partially answered. The objectives of the program and the plans for financing and operating the school farm will determine how effective your time will be used. If you cannot answer the above questions "yes," you become a farm manager, a salesman, a buyer, a mechanic, a truck driver, a bookkeeper, a file clerk, and a part-time teacher.

Will the school farm be put to its best use in curriculum innovation?

The Vocational Education Amendments of 1968 call for bold new programs. Are you ready to implement curriculum innovation? Believing that vocational agriculture has done a good job does not foster innovation. An intense desire to do better is the basis of most innovation. Not only must there be a change in the vocational agriculture teacher, there must be a change in the teaching facilities. The facilities should be determined by the course of study. Will you be guilty of teaching agricultural occupations in a production agriculture classroom?

Are you willing to teach in a multi-teacher department?

The vocational agriculture department has traditionally been a one-man operation. Teacher education has been



Vocational agriculture students attending Miami's Vocational Agriculture School use the farm facilities at the school for study and experience in poultry production.

directed at the one-man department. The one-man program concept is fascinating but an impossible task. Curriculum changes are occurring in undergraduate agricultural education in colleges across the United States. The new graduate in agricultural education will be better prepared for the multi-teacher department; he may also be a specialist in a specific area such as poultry, ornamental horticulture, or agricultural business.

Are you, the one-man department, ready to become a specialist and a member of a team? Cooperating with other teachers is probably the most important factor in the successful operation of a multi-teacher department. The future of vocational agriculture depends upon how well teachers, principals, and supervisors are able to develop and operate large departments.

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TEACHERS' PROBLEMS IN CONDUCTING SUPERVISED FARMING PROGRAMS

EARL S. WEBB, Teacher Education
Texas A&M University



Earl S. Webb

It is generally recognized that effective teaching is in a real life situation. Thus the application of classroom instruction becomes meaningful when applied in the real situation—the farm, for example. Classroom instruction is not enough unless applied, regardless of how well it is done.

The aim of preservice and inservice teacher education and supervision is to assist teachers of vocational agriculture in conducting learning activities of students in a manner that will bring the greatest degree of satisfaction and the highest possible benefit to society. Therefore, evaluation is necessary if teacher education is to determine how well former students are performing. Inferences can be drawn from a determination of difficulties encountered by teachers that would assist teacher educators in making adjustments in either preservice or inservice programs.

• The Study

The major purpose of the study reported in this article was to determine the relative degrees of difficulty experienced by teachers of vocational agriculture in conducting supervised farming programs. Specifically, we sought to answer these questions.

—What are the relative degrees of difficulty encountered in conducting specified activities of supervised farming programs?

—To what degree do relative degrees of difficulty change with years of teaching experience?

—To what extent does graduate study influence the relative degrees of difficulty encountered by teachers?

—To what degree do area supervisors

estimate a need for improvement among teachers in conducting specified activities of supervised farming?

Information forms were sent to teachers of vocational agriculture requesting that they indicate the degree of difficulty encountered in performing specified activities of supervised farming programs. If the teacher responded negatively to the activity, he was asked to select one of five reasons why he responded as he did. On the other hand, if he responded positively, he selected a degree of difficulty he experienced in conducting the activity. Information forms were also sent to supervisors who were requested to estimate the percentage of teachers who needed improvement in the activities listed.

• Findings

Neither years of experience nor hours of graduate study were related to the degrees of difficulty expressed by teachers. The degree of difficulty expressed by teachers in performing the specified activities tended to parallel the percentage of teachers estimated by supervisors to need improvement in performing the activities. In general, tasks rated at the highest level of difficulty were those tasks supervisors suggested needed much improvement by teachers.

The ten items ranked by teachers, from the most difficult to the least difficult, were:

—Require students to make budgets for farming programs

—Require students to develop written annual plans for conducting farming programs

—Get students to keep accurate and complete records of farming programs

—Require students to analyze the records of their farming programs

—Help students select appropriate improvement projects

—Maintain a written record of recommendations made during supervisory visits

—Get farming programs started early during the first quarter of the school year

—Arrange for partnership or ownership of projects

—Develop student interests in supervised farming programs.

—Develop a written schedule of supervisory visits during summer months

Responses by supervisors, ranked according to estimated percentage of teachers needing much improvement, were:

—Requiring students to develop written plans for conducting farming programs

—Requiring students to make budgets for farming programs

—Developing written schedules of supervisory visits during summer months

—Requiring students to analyze the records of farming programs

—Helping students select appropriate improvement projects

—Helping students select appropriate supplementary farm practices

—Requiring students to keep accurate and complete records of farming programs

—Scheduling time to visit all students during the second year

—Getting farming programs started during the first quarter of the school year

—Developing student interest in farming programs

Encouraging students to adequately plan supervised farming programs is evidently a difficult task for most teachers. Yet, it seems logical that successful supervised farming programs result from careful and prudent planning.

Both of the items deemed most difficult

(Continued on next page)

Occupations and Earnings of Past State FFA Presidents

W. H. WAYMAN, Supervision (Retired)
West Virginia Department of Education



W. H. Wayman

From 1928 to 1968, the first forty years of the West Virginia Association of FFA, 39 members served as state president — one member served a two-year term. In April 1969, all living past state FFA presidents were asked to report their educational and occupational achievements and their income in 1968. Three of the former officers were deceased.

Education. Of the 36 former state FFA presidents living in 1969:

3 had earned a doctoral degree

7 had earned a master's degree

5 had earned a bachelor's degree

2 had completed two years of college

4 had completed one year of college

4 were currently enrolled in college

11 had completed high school

Occupations. Excluding the four past state FFA presidents who were in college in 1969, the study revealed the following occupations for the remaining 32 former vocational agriculture students.

6 were farming full time

12 were in other agricultural work;

5 of the 12 were farming part time

14 were engaged in non-agricultural occupations; 4 of the 14 were farming part time

Twenty-three of the 32 former officers who were working full time were work-

ing in West Virginia. The other nine were working in eight different states.

difficult by teachers seem to be essential to good planning. Of the 35 per cent of teachers who did not require written annual plans, almost two-thirds gave as the reason "do not believe it important." It is likely that many teachers have discontinued the practice of requiring annual plans because they are of the opinion that the plans developed are not worth the effort required. Supervisors estimated, however, that 60 per cent of the teachers needed much improvement in conducting this practice.

Likewise, only 66 per cent of the teachers required students to make budgets for farming programs. More than one-half of those not requiring budgets gave as the reason "do not believe it important." As before, supervisors estimated that more than half of the teachers needed much improvement in teaching students to develop budgets.

The third most difficult task of teachers was to get students to keep complete

and accurate records. It is likely this difficulty is related to inadequate planning. Supervisors estimated that about one of each four teachers needed much improvement in teaching record keeping.

Related to record keeping is the problem of analyzing records for teaching purposes. Teachers find the analysis of records a difficult task, and supervisors estimated that more than one-half of their teachers needed much improvement in performing this activity.

• Conclusions

It seems logical to assume that preservice and inservice programs for teachers should be adjusted somewhat in techniques and philosophy if effective learning is believed to be in the application of knowledge to a real situation. It is difficult to see how effective programs can be developed if

students are not required to plan management practices.

The findings of this study seem to warrant the conclusion that most of the problems may be inherent in a lack of philosophical background that places priority on the application of knowledge in a practical situation. Perhaps the role of supervised farming in relation to the process of learning has not been adequately emphasized in the preparation of teachers or inservice development.

On the other hand, the aim of the program may be viewed by teachers as inconsistent with current social and technical developments. Teachers may have rejected the philosophical framework of supervised farming specified in the past and substituted a more practical aim. This would account for the apparent differences between what is being done and what teacher educators and supervisors think should be done.

Labor Management Instruction: Essential in Agricultural Production

JACK F. LAWRENCE
University of California, Davis

High tribute is often accorded FFA programs for leadership development provided vocational agricultural students. Similarly, young farmer organizations are designed to provide further training and experience in leadership and citizenship. Yet, the agricultural complex is confronted with a variety of labor management woes; and coupled with mounting pressures from outside of agriculture, the outlook makes the situation even more critical.

Labor management, for most farmers, is a vital element in the production process, particularly when large groups of people are employed. The role of the supervisor at all levels of management becomes even more accentuated and too often spells trouble for the agricultural leader who has not developed skills in supervising people.

Labor Management

Traditionally, agricultural education has been centered on production practices with some emphasis on economic management. One of the primary problems of operating a business, however, is the management of labor. Unfortunately, education in agriculture has ignored this aspect of the agricultural business almost completely. In California this deficiency has become quite noticeable since the termination of the Bracero Program in 1965 which eliminated highly skilled Mexican nationals from the work force.

The need for better labor management instruction has been felt by more and more members of the agricultural community with the result that some 75 adult foreman training programs have been conducted in various parts of California since 1965. Course enrollments average about 22 supervisors of farm labor per class with an average labor management load of 32 for each

class member. These are twenty-hour short courses for people who are employed at some level of supervision. During the past four years these courses reached some 1,530 supervisory personnel responsible for nearly 50,000 workers.

The topics included in the instructional program were motivating people, establishing good employer-employee relations, treating people as individuals, and applying procedures for solving personnel problems. Individual and group instructional techniques and job simplification procedures were also included.

High School Instruction

Material on the management of labor should be a part of educational programs for future owners and supervisors also. Consequently, a nineteen-hour instructional unit was developed in 1968 and distributed to vocational agriculture teachers throughout California for use at the secondary level. The curriculum guide, "Supervision in Agriculture" which evolved from the adult farm foreman courses, was developed by vocational agriculture teachers and the staff of the Department of Applied Behavioral Sciences at the University of California's Davis campus.

The integration of instruction on the management of labor into existing high school farm management courses or agri-business courses where personnel management techniques are covered has been very successful. An example of another type of labor management instruction is the vocational agriculture program at John W. North High School in Riverside, California, where the teachers offer teacher-aid and crew-leader training in advanced courses in horticulture, landscaping, and horticultural mechanics. This instruction develops students' abilities to supervise



Jack F. Lawrence

Jack F. Lawrence taught vocational agriculture in Sonoma County, California, where he organized farm labor supervisor courses and helped develop the high school course in supervision described in this article. Currently he is Supervisor, Adult Education, Department of Applied Sciences, University of California, Davis.

a crew of agricultural workers. In Placerville, California, the vocational agriculture teacher has initiated a special skills course for handicapped students who are supervised by student crew leaders who are considered disadvantaged.

Learn by Doing

In addition to classroom instruction, supervision of people can also be taught through activities such as supervising activities at the county fair. My experiences as a high school teacher attest to the "learn by doing" experiences vocational agriculture students encounter while performing duties which I call straw-bossing. For example, placing a student leader in charge of the chapter's beef division exhibitors has brought some real returns in human relations and productive skills as well as help to the teacher as a teacher-assistant.

Livestock judging represents another activity for applying human relations skills with FFA sponsored field days for 4-H members or with the use of student coaches for team judging competition. A teacher's project visitation can also provide the opportunity for older agriculture students to assist with the correct methods of demonstrating skills such as castrating, tagging, and shearing.

Teachers of high school students and adults can serve a vital function by examining programs for determining curricular and extra-curricular needs for training supervisory skills. We can be proud of the technical impact of vocational agriculture programs on agriculture. It is now time to take stock of the emerging need to cope with "people practices."

Farm Laboratory Aids Post-Secondary Instruction in Agricultural Production

LARRY L. STATLER and R. J. JUHL
Kirkwood Community College
Cedar Rapids, Iowa

In most vocational-technical programs, an extensive and well-equipped laboratory is essential. For some reason, the attitude has been prevalent that perhaps a laboratory was not needed or was not important for programs in agricultural production.

At Kirkwood Community College (Cedar Rapids, Iowa) we felt an extensive laboratory was very important for agricultural production, so we launched our Central Demonstration Farm. This farm laboratory is presently used almost full-time by 100 students in agricultural programs at Kirkwood Community College.

Business Operation

Since our goal is for the laboratory to be as nearly as possible a two-man farm business operation, the following production enterprises are currently in existence: a production and marketing program of nearly 1,500 commercial swine; a 40-cow pure-bred beef herd; a 22-ewe pure-bred sheep flock; a 30-ewe cross-bred sheep flock;

a feeder cattle operation, yet to be implemented; approximately 300 crop acres; and a full line of leased new farm machinery. These production enterprises are operated on a successful practice-demonstration basis. The operation is not experimental in nature.

Student Involvement

First-year agricultural production students are engaged in the various demonstrations and operations having to do with purchasing, producing, and marketing the various products. These problems and activities are carefully woven into the classroom activities.

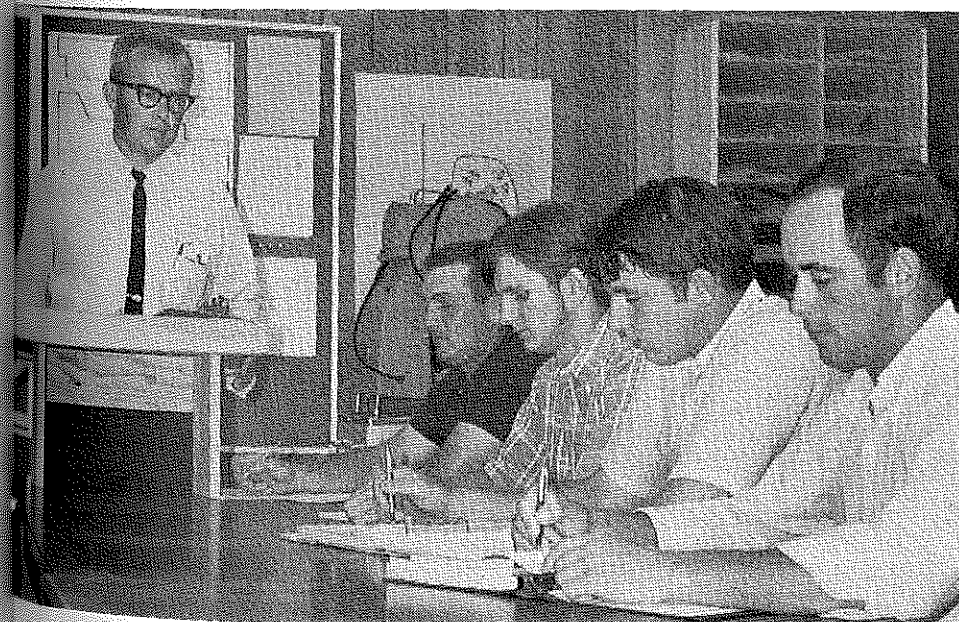
The farm laboratory, so far as decision making, is run by second-year agricultural production students. The program is a two-year post-secondary program. Second-year students serve as a student board of directors or as hypothetical stock-holders. They have hired two students from their class to serve as student managers. This has proven to work very satisfactorily with

the student managers supervising others in the actual carrying out of the work tasks. A benefit has been that the laboratory has created part-time work, and thus scholarship money, for nearly 20 students thus far.

Finance and Records

The Central Demonstration Farm is financed on a revolving account basis, whereby all funds expended by the School Board of Directors are replenished by the earnings of the enterprises. In effect, the Board of Directors has been a lender.

The entire farm laboratory is set up on a detailed enterprise record basis so that each phase of the production enterprise is recorded and analyzed. This record system is such that a group of students can set up and conduct various demonstrations and analyze the results of these demonstrations. We believe our students in agricultural production are receiving instruction in practical decision-making in agriculture.



R. J. Juhl (standing), Swine Specialist Instructor at Kirkwood Community College, supervises a student management committee as they make decisions concerning the farm laboratory.

Technical Education in Agricultural Production

ROBERT M. McGUIRE
Agricultural and Technical College
Cobleskill, New York

Post-secondary education is booming! The junior colleges in the United States are giving more people a chance for additional education than they had before. These institutions, whether they are called community colleges, two-year colleges, junior colleges, or technical institutes, may well turn out to be one of the most unique and important contributions to the United States educational systems.

Vocational and technical education in agriculture can thrive in a variety of institutions if there is the desire and understanding on the part of those responsible for these institutions. There are many young people in rural and urban areas who can use their background and interest for rewarding careers in agriculture and the natural resources.

Education in Agriculture

Agriculture, like all other elements in our society, has undergone vast and sweeping changes. Agriculture, one of this nation's largest and most vital industries, must remain strong. The way to a strong and vigorous agriculture is to provide the necessary education and experience for today's youth.

We have looked at the need for education in agriculture. It might be appropriate to look at one of the Agricultural and Technical Colleges in New York State — Cobleskill. The college was chartered under the laws of 1911 of the State of New York. In 1919 the College officially began its program as the Schoharie School of Agriculture. Programs have attempted to meet present demands of the state and the area.

In 1951 the College, as an accredited technical-terminal junior college of the State University, was granted the authority to award the Associate in Applied Science degree. In the spring of 1968 the Legislature funded the formation of vocational programs in

Animal Husbandry (Dairy Cattle Management) and Agricultural Mechanics (Farm Mechanics), and in 1969 Grounds and Greenhouse Management in the plant science area was authorized.

Production Agriculture

It seems that every so often we go through a cycle of what appears to be the demise of production agriculture. But it comes back stronger and sounder for having gone through the reappraisal. We must remember that production agriculture is the sinew and muscle of agriculture.

If an increase in the number of students enrolled in production agriculture programs is an indication of strength, then look at our enrollment figures for the last three years. There were 68 freshman Animal Husbandry students entering in the fall of 1967; in the fall of 1968 93 entered; and in 1969, 153 started their first term at Cobleskill. In addition, a vocational Dairy Cattle Management program started late in 1968 with 12 students and this increased to 20 in 1969. Projected enrollments call for a continuing increase.

Programs

The Dairy Cattle Management program has as its main goal the training of dairy herd managers. Students take courses in feeding dairy cattle, dairy cattle selection and showing, animal health and disease, farm mechanics, and field machinery as well as written and oral communications. In addition the student spends large blocks of time working with the college herds and on the college farm. The student has a specific occupational goal in mind. The courses and the course work are then structured around a particular goal. The job cluster is then more clearly defined.

Continuing re-evaluation of programs, facilities, and curriculum content is necessary. Without the re-evaluation, programs and faculty become stale and outmoded. The establishment of the Dairy Cattle Management program is one result of this re-evaluation. Further expansion of a horse option in the technical program has also helped to increase the number of students enrolled.

The program in Animal Husbandry is set up to prepare students for a cluster of jobs relating to livestock and livestock production. To fulfill degree requirements, students must complete satisfactorily a minimum of 66 credit hours of academic work, including 36 hours in the major field, 22 hours in general education, and 8 hours of electives.

Facilities and Faculty

The training of students in production skills requires that there be available tools, equipment, facilities, and livestock if students are to gain that all-important firsthand experience. A dairy herd of approximately 130 Holstein and Guernsey cattle provides excellent firsthand experience for both vocational and technical students. Incidentally, our herd production is approximately 19,000 pounds of milk for the Holstein herd and 12,000 pounds of milk for the Guernsey herd! We manage this with some 125 different students milking the cows each year.

Other livestock on the farm include a beef herd of 18 brood cows and replacements and 10 steers. A band of 15 quarter horses (broodmares and their foals) complete the livestock. Livestock facilities include a four-row dairy barn with liquid manure handling, milking parlor, and separate calf raising facilities. A livestock judging pavilion and a meat processing laboratory are also included in the agricultural complex. The college farm, composed of 300

(Right)

Students in the production agriculture programs at the Agricultural and Technical College get first-hand experience with the College's herd of Holstein and Guernsey cattle.

acres of cropland and pasture, affords students many worthwhile experiences ranging from building fences to filling silo.

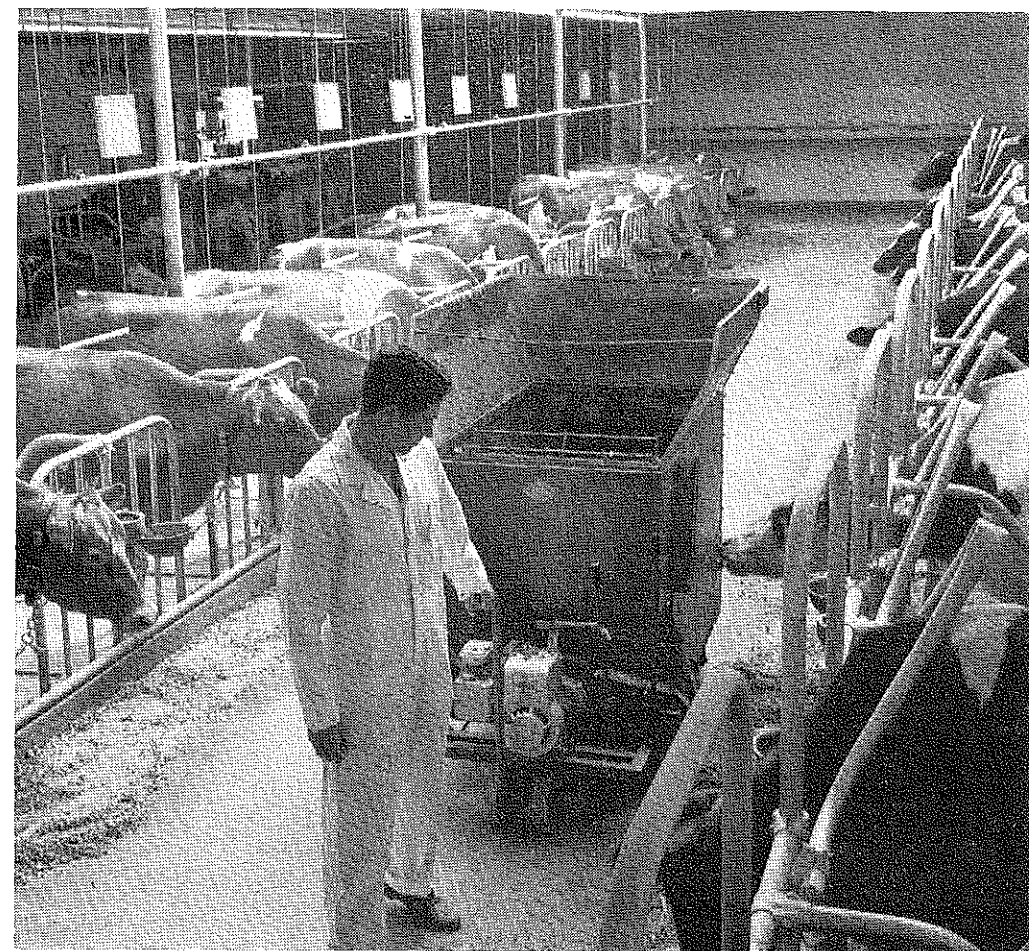
The faculty at Cobleskill teach both technical and vocational students which gives them a better understanding of both groups of students. The major responsibility of faculty is teaching and advising students; therefore, a broad background in agriculture and its related areas is very important. There is a real joy and sense of accomplishment to be found in teaching these students.

Placement

Placement opportunities for graduates in Animal Husbandry appear to be unlimited. Placement reports show that students are securing employment as farm managers, trainers, and herdsmen; some form partnerships; some become owners. In the related service areas job opportunities include artificial insemination technicians, equipment salesmen, feed and seed salesmen, and riding instructors. The meat packing industry and state inspection services are employing increasing numbers of graduates. Salaries are very good and commensurate with the ability of the individual. A significant percentage of students are continuing their formal education toward the bachelor's degree.

Post secondary educational programs can and are filling a definite need for both the student and the employer. These programs on a college campus afford the student a chance for independent living away from the high school atmosphere. It is not just another year or two in high school; it is a period of time away at college! The student must learn to manage his time, money, and life. He must also learn the many interpersonal relationships that are a part of college life.

The technological explosion in agriculture has increased the application of the sciences to agriculture. Hence, there is a great opportunity for individuals with technical education in production agriculture. Technical education at the junior college level is the logical approach for a strong and healthy agricultural industry.



BOOK REVIEW

ORNAMENTAL HORTICULTURE AS A VOCATION by Stanley B. Moore. Fairborn, Ohio: Mor-Mac Publishing Co., 1969, 364 pp. \$6.50.

The author attempts to cover all the technical subject matter of ornamental horticulture, what the occupations are, their selection, and how to merchandise and sell horticultural products. The book is a text and a reference at the same time. It contains descriptions of all types of plant materials from trees to annuals, their culture, propagation, and special requirements.

High school students without any background in agriculture could start at the beginning and use the book; however, a prior course in biology or botany would be most helpful.

There are no pictures and no review or study questions. The book is written for use in all parts of the United States, but it is most appropriate for climates like that of Kentucky and Ohio. Little attempt was made to describe which plants were hardy enough for the colder climates and the book does not have a learning by doing orientation. One copy of the book would be useful for the vocational agriculture library. City and suburban high schools without the usual collection of reference materials could use the book as a text with limited supplemental printed material for a special course in ornamental horticulture.

Martin B. McMillion
University of Minnesota

The Operation and Functions of Citizen's Advisory Committees

FLOYD L. McKINNEY
University of Kentucky

Changes in the nature of jobs, the advancement of technology, population mobility, and an incessant demand for new skills and new knowledge create challenging opportunities in vocational agriculture. Agricultural educators take pride in providing opportunities for each individual to develop to his fullest potential. As the complexities of the world of work have increased, it has become more difficult than ever before to provide opportunities of a complex and varied nature so that each student can achieve his full potential.

The local citizens advisory committee is a tool we could use more frequently to assist in developing and upgrading programs of agricultural education. Citizens of the community are generally eager to assist teachers; but unless teachers and administrators provide leadership and an opportunity to participate, the good intentions of citizens will be in vain.

• The Study

The operation and function of a citizens' advisory committee can involve a complex pattern of relationships. If teachers are to work effectively with citizen advisory committees, it is important that they possess an understanding of how citizens and various educational groups perceive and expect the citizen advisory committee to operate and function. This article reports the findings of a study designed to determine the perceptions and expectations of citizen members of vocational advisory committees, vocational educators, and school administrators regarding the operation and functions of the citizen advisory committee.

Citizen members of vocational advisory committees, vocational educators, and school administrators associated with six comprehensive Michigan

secondary schools participated in the study. Eighteen school administrators, 54 vocational educators, and 182 citizens (85 percent of the prospective respondents) returned questionnaires.

Generally, respondents were between 25 and 54 years of age and had worked with citizen committees for two years or less. About 95 percent of the school administrators had either a master's or specialist degree and nearly half of the vocational educators had completed a master's degree program. Twenty-three percent of the citizens had earned a bachelors degree; 19 percent held a technical or associate degree; and 47 percent were high school graduates. Considering all respondents, 40 percent had not taken any high school vocational education, and 59 percent had not taken any post-high school vocational education.

• Findings

Citizens, vocational educators, and school administrators differ in their opinions concerning citizens' committee selection and organization. Generally, the respondents tended to support a committee size ranging from five to nine persons. Although there are distinct differences between educators and citizens regarding their choice of time for the annual organizational

meeting of the citizens' committee, the date chosen most frequently was September 1.

Support for persons of various levels of education being represented on the committee was stronger by school administrators and vocational educators than by citizens. Vocational educators and citizens expressed less agreement than the school administrators regarding committee membership, including representatives from the community labor force.

Reaction to whether a committee member should accept appointment to a citizens' committee only after he is sure the school is actually seeking advice was quite varied, but a distinct difference was evident. The citizens most strongly favored a committee member accepting appointment to a committee only after he is sure the school is actually seeking advice followed by the vocational educators with the school administrators exhibiting the most agreement. The citizens registered the greatest support for the local board of education making the final selection of committee members as contrasted to vocational educators who expressed the most disagreement.

The most support for regularly scheduled citizens' committee meetings was indicated by citizens followed by



Floyd L. McKinney

In this article Dr. McKinney reports the findings of his Ph.D. dissertation, "Citizen Perceptions and Professional Educators Expectations Regarding the Vocational Citizens Advisory Committee," which was completed at Michigan State University in 1969. Dr. McKinney is Assistant Professor of Education in the Research Coordinating Unit at the University of Kentucky, Lexington.

the school administrators and the vocational educators. Generally, all respondents favored committee officers coming from the lay members of the committee.

The general consensus of the respondents was that the vocational director or coordinator should be the school representative to the citizens' advisory committee. However, nearly 50 percent of the vocational educators favored the vocational teacher as the school representative. School administrators, followed in order by citizens and vocational educators, favored liaison persons from the school working with the citizens' committee, a person from the school keeping committee members informed about the school's vocational programs, and a liaison person keeping committee members informed about trends in vocational education.

The citizens agreed more than the school administrators or the vocational educators that a committee should consider only the problems assigned to it by the board of education or the school administration. General support was evidenced in the responses of the groups for a citizens committee to evaluate local vocational education policies, local long-range plans for vocational education, facilities planning and improvement, and equipment planning and improvement. The respondents were almost unanimous in their agreement that citizens committees should annually evaluate their own work and effectiveness.

• Recommendations

The following recommendations regarding citizen advisory committee member selection and organization are based on the findings of this study, review of the current literature, and the experience of the writer.

—Citizen advisory committee size should range from five to nine persons.

—September 1 is the most ideal time for the annual organization meeting of the citizen advisory committee.

—Persons of various levels of education should be represented on the citizen advisory committee.

—Citizen advisory committee membership should include representatives from the community labor force.

—Citizens should accept membership to a citizen advisory committee only after they are sure the school is actually seeking advice.

—The local board of education should make the final selection of individuals to serve on the citizen advisory committee.

—The citizen advisory committee should hold regularly scheduled meetings, with the qualification that there must be a recognized need for meeting.

—Citizen advisory committee officers should be chosen from the lay members of the committee.

—The vocational director or coordinator is the most logical choice of school representative to the general vocational education citizen advisory committee.

—Liaison persons from the school should work with the citizen advisory committee, should be responsible for keeping the committee members informed about the school's vocational program, and should keep committee members informed about trends in vocational education.

—Citizen advisory committees should not be limited to considering only those problems assigned to it by the school's board of education or by the school administration.

—A primary function of a citizen advisory committee is the evaluation of local vocational education policies.

—Citizens advisory committees should make evaluations regarding local long-range plans for vocational education, should make evaluations regarding facilities planning and improvement, should make evaluations regarding equipment planning and improvement, should make evaluations regarding equipment planning and improvement, and should annually evaluate their work and effectiveness.

• Implications

Future teachers of agriculture should encounter educational experiences during their formal years of schooling that would better prepare them for work with citizens groups. Teacher educators in agricultural education should be aware of the need for prospective agriculture teachers, coordinators, and directors of vocational education to possess a knowledge of citizen committee operations and functions sufficient to allow them to work effectively with citizen groups.

Many educators agree that administrative commitment to the need for citizen groups is crucial to the successful operation of citizen advisory committee.

This would seem to make it crucial that prospective school administrators receive education in the techniques and procedures of working with citizen committees.

It can be assumed that important differences exist between citizens and practicing educators. In-service education programs for educators could prove to be a profitable means of securing better understanding in regard to the use of citizen committees.

The findings of this study suggest that school representatives working with citizen groups can improve the effectiveness of citizen groups by an educational and informational program for the citizen committee members. Perhaps a good many differences existing between the citizens and educators can be overcome by a better understanding on the part of the citizen in regard to the purposes of the citizen committee.

BOOK REVIEW

ADVANCES IN PEST CONTROL RESEARCH edited by R. L. Metcalf. New York, New York: John Wiley and Sons, Volume III, 1968, 255 pp. \$15.00.

The subject matter presented in this book was selected from recent research findings relating to important phases of weed and insect control. It was edited by a leading toxicologist. The findings are given very explicitly in rather scientific terms.

The book would have limited use in a secondary educational program. It could be used in a junior college if the students are given the necessary scientific background and are training for a speciality in agricultural pesticides. It should be used as a reference by teachers of agriculture who offer pesticide instruction. Students on the secondary level would not have had the necessary scientific background for comprehension of the technical content of the book.

John D. Todd
University of Tennessee

Special Editors Appointed

Readers will note on the inside of the front cover that Special Editors have been realigned to serve areas corresponding to the North Atlantic, Central, Southern, and Pacific Regions. On this page, the appointment of five new Special Editors is announced. Special Editors continuing their present appointments are:

North Atlantic Region: Philip L. Edgecomb, University of Massachusetts and Charles C. Drawbaugh, Rutgers University

Southern Region: James C. Atherton, Louisiana State University

Pacific Region: Dwight L. Kindschy, University of Idaho and E. M. Juergenson, University of California, Davis

Book Reviews: Gerald R. Fuller, University of Vermont

Pictures: Robert W. Walker, University of Illinois

NVATA: James Wall, Lincoln, Nebraska

Central Region



Bob R. Stewart

Bob R. Stewart is Assistant Professor of Agricultural Education at the University of Missouri. Dr. Stewart is a former teacher of vocational agriculture at Gower, Missouri. He received his B.S. and

Master of Education degrees in agricultural education from the University of Missouri. He participated in the National FFA Fellowship program at the University of Maryland, the institution from which he received the Ed.D. degree in Educational Administration and Curriculum with a minor in Agricultural Education.

Dr. Stewart is a member of Phi Delta Kappa, Gamma Sigma Delta, Alpha Zeta, and Alpha Tau Alpha. He is active in the American Association of Teacher Educators in Agriculture and the American Vocational Association. Currently he serves as faculty adviser to the Collegiate FFA and Alpha Zeta chapters at the University of Missouri.



Martin B. McMillion

Martin B. McMillion is Associate Professor of Agricultural Education at the University of Minnesota where his major responsibility is in the area of off-farm agricultural occupations. Dr. McMillion is presently the National Secretary-Treasurer of Alpha Tau Alpha, and has served as secretary and chairman of the planning committee of the National Student Teachers' Conference in Agriculture.

He has a bachelor's degree from West Virginia University, his native state, a master's degree from The Pennsylvania State University, and the doctorate from the University of Illinois. Dr. McMillion has worked as a vocational agriculture teacher in West Virginia and Pennsylvania, as a graduate assistant at The Pennsylvania State University, as a graduate assistant and instructor at the University of Illinois, and has overseas experience in agricultural education in New Zealand and Brazil.

Southern Region



Willie T. Ellis

Willie T. Ellis is Associate Professor of Agricultural Education at North Carolina A & T State University, Greensboro. Dr. Ellis has experience as an instructor in the Veterans Farmer Training Program and as a vocational agriculture teacher in North Carolina. He is a former Associate State Supervisor of Vocational Agriculture with the North Carolina Department of Public Instruction.

Dr. Ellis holds B.S. and M.S. degrees in agricultural education from North Carolina A & T State University. He holds the Ph.D. degree in Agricultural Education with minors in Rural Sociology and Educational Administration from Cornell University. He is a member of the American Vocational Association, American Association of Teacher Educators in Agriculture, and Phi Delta Kappa. Dr. Ellis served with the U.S. Army in Japan.



Earl S. Webb

Earl S. Webb is Professor of Agricultural Education at Texas A & M University. A native of Missouri, Dr. Webb taught elementary school in that state for six years and taught vocational agriculture in Missouri for seven years.

He earned the doctorate at the University of Missouri. He was a member of the staff of the Department of Agricultural Education at the University of Missouri for five years before taking his present position. At Texas A & M University his responsibilities include graduate teaching and serving as graduate coordinator for the master's and Ph.D. programs of the Department of Agricultural Education.

(Continued on next page)

Pacific Region



Floyd G. McCormick

Floyd G. McCormick, Jr., is Professor and Head of the Department of Agricultural Education at the University of Arizona, Tucson. Dr. McCormick is a former teacher of agriculture in Colorado. He has been a staff member in agricultural education at Colorado State University, The Ohio State University, and the Ohio Department of Education.

Dr. McCormick holds the B.S. and Master of Education degrees from Colorado State University and the Ph.D. from The Ohio State University. He is a member of Phi Delta Kappa, Gamma Sigma Delta, American Vocational Association, and American Association of Teacher Educators in Agriculture. He served as a member of the Committee on Agricultural Education, CEANAR, National Academy of Sciences, from 1967 to 1969.

From the Book Review Editor's Desk

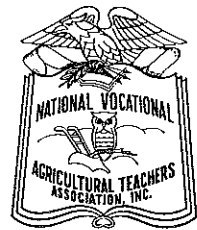
SAFETY AND HEALTH IN AGRICULTURAL WORK. Washington, D.C.: International Labor Office, 1965, 131 pp. \$1.75.

This publication contains a "body of precise recommendations for the guidance of authorities, professional groups and all those with responsibilities in the promotion of occupational safety and health in agriculture, including the self-employed farmer." This code is not intended to replace national or local laws or regulations. But it provides an extremely well organized and easy to understand listing of safety practices with which every agriculturalist should become familiar.

GUIDE TO SAFETY AND HEALTH IN FORESTRY WORK. Washington, D.C.: International Labor Office, 1968, 223 pp. \$2.25.

A publication designed to serve as a guide in the improvement of health and safety in forest work throughout the world. The code is not meant to replace national or local laws and regulations. All teachers involved with instruction in forestry — commercial or farm — will want at least one copy of this precisely written, well organized safety guide.

News and Views of NVATA



JAMES WALL
Executive Secretary

WHERE DO WE GO FROM HERE?

This question was answered by Dr. James Durkee of Wyoming, Chairman of the NVATA-USOE Committee, when he reported to the NVATA delegates at the National Convention in Boston with the following comments.

—We still have not opened the right door or used the right pitch. I believe there are still ways and means to have an administrative decision made by the Administration. Some contacts with President Nixon are being planned at the present time.

—More authority could be given to our voice if all of the vocational services, through AVA, would join forces with the NVATA in demanding that specialists be employed for vocational education.

—Special legislation is not an impossibility but it will take time and it will take all in agriculture and education working together if it is to pass.

—Another possibility is to build the whole barn so we might have a stall in it. That would be to join all educators in order to have established a Cabinet Department of Education which would provide a level of leadership that is necessary for all of education thus giving agricultural education and vocational education a respective position in a Department of Education. Efforts in

this direction have been taking place in Congress for the past 60 years. Maybe the time is ripe to have such legislation passed.

—There are available in Washington public affairs experts who will sell their services to the NVATA to keep pounding on doors in the halls of Congress as well as in the Health, Education and Welfare Department to see that agricultural education is identified in the Office of Education. These services do not come cheap; but if this has some possibilities, your Executive Committee should explore this avenue.

—A number of state departments of education are as confused on leadership and direction as the Office of Education. It is our task and our responsibility to hold the line at the state and local levels to maintain and build leadership for our profession.

—The task that your NVATA-USOE Study Committee has been assigned has just begun. I believe that this body of delegates should renew their support by commending the action of your Executive Committee and adopting the resolution "To Re-establish a Department of Agricultural Education in the Office of Education" as a continuing resolution until the work is completed.

Destroy Certain Reference Materials on DDT

The recent cancellation by the U.S. Department of Agriculture of registration for certain uses of DDT makes it necessary for teachers to update reference materials. Selected USDA publications have been withdrawn from circulation. Teachers may contact local Extension Service personnel for information concerning the USDA publications that are to be discarded.

Stories in Pictures

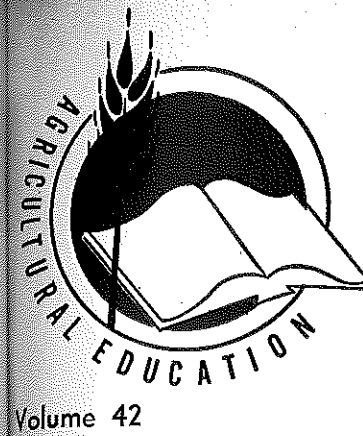
ROBERT W. WALKER
University of Illinois



A part of Minnesota's 21,225 day-old ducklings that were airlifted from the Max McGraw Wildlife Foundation are shown with a Northwest Airlines Stewardess and FFA duck raisers from Long Prairie, Minnesota. (Photo by W. J. Kortsmaki)



Vocational agriculture teachers cited by the Pfizer Agricultural Division during the NVATA Convention in Boston for outstanding service to the FFA are (left to right) Vancil Minnick, Stet, Missouri; Cecil M. Grant, Jr., Section, Alabama; and Dean Pense, accepting awards for Ray W. Knudsen and Holgrim Hollo, Simms, Montana. R. M. Hendrickson (right), Vice President-General Manager of the Pfizer Agricultural Division, made the presentations. (Chas. Pfizer and Company, Inc. photo)



Volume 42

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Number 11



Featuring —

GENERAL AND PRACTICAL ARTS EDUCATION IN AGRICULTURE